

COPENHAGEN BUSINESS SCHOOL
SOLBJERG PLADS 3
DK-2000 FREDERIKSBERG
DANMARK

WWW.CBS.DK

ISSN 0906-6934

Print ISBN: 978-87-93339-08-8
Online ISBN: 978-87-93339-09-5

TOWARD A DIGITAL STRATEGY FOR OMNICHANNEL RETAILING

PhD Series 13-2015

Rina Hansen

TOWARD A DIGITAL STRATEGY FOR OMNICHANNEL RETAILING

The PhD School of LIMAC

PhD Series 13.2015

CBS  COPENHAGEN BUSINESS SCHOOL
HANDELSHØJSKOLEN

Toward a Digital Strategy for Omnichannel Retailing

Rina Hansen

Department of IT Management
Copenhagen Business School
Howitzvej 60, 3
2000 Frederiksberg
Denmark

Primary supervisor: Professor Niels Bjørn Andersen, Department of IT Management, CBS

Secondary supervisor: Professor Majken Schultz, Department of Organization, CBS

Third party supervisor: Professor Phillip Yetton, School of Strategy and Entrepreneurship,
UNSW

LIMAC PhD School
Copenhagen Business School

Rina Hansen
Toward a Digital Strategy for Omnichannel Retailing

1st edition 2015
PhD Series 13.2015

© The Author

ISSN 0906-6934

Print ISBN: 978-87-93339-08-8
Online ISBN: 978-87-93339-09-5

LIMAC PhD School is a cross disciplinary PhD School connected to research communities within the areas of Languages, Law, Informatics, Operations Management, Accounting, Communication and Cultural Studies.

All rights reserved.

No parts of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage or retrieval system, without permission in writing from the publisher.

ACKNOWLEDGEMENTS

This thesis details a formidable transformational and educational journey that has greatly shaped the company I work for as well as myself personally. Throughout the journey I have been graced with wonderful supportive acquaintances and relationships, without which the research and this concluding thesis would not have been possible.

I would first like to thank my supervisor, Professor Niels-Bjørn Andersen, without whom I would never have commenced nor endured this PhD endeavor. I would also like to thank my co-supervisor, Professor Majken Schultz, for her support, even though I was not able to immerse myself as deeply in the field of branding and organization as I wished (due to the stringent IS focus). Furthermore, I'm very thankful for my third party supervisor, Professor Phil Yetton, who, during the last part of the PhD, kindly helped me structure the thesis and understand how to apply the business and IT strategy alignment framework to my research.

I am also immensely grateful for having worked with my skilled co-authors, Professor Christina Soh, Professor Siew Kien Sia and Assistant Professor Adrian Yeow. They contributed to shaping the tremendous amount of data into something meaningful and useful, introduced me to dynamic capabilities and alignment, encouraging and supporting me throughout the exciting writing process.

I would also like to thank Kim Normann Andersen, who was my opponent in my two work-in-progress seminars and who strongly contributed to sharpening my IS focus. I would like to show my appreciation to all of the faculty and PhD students at ITM, and especially those who helped develop my research understanding in the beginning: Heidi Tscherning, Gregory Gimple, Phillip Holt, Michelle Antero and Soley Rasmussen. I furthermore highly value the conference and journal reviewers for their insightful critique and suggestions, which helped bring my papers to their current state.

Many others at CBS also deserve gratitude for their help, especially: Anni Olesen for making sure that the important formalities were seen to and Thomas Basbøll for being much more

than a writing coach. He put my research into perspective and helped me understand my challenges in the process.

I am deeply grateful to the Hummel organization. First, heartfelt thanks to Søren Schriver, CEO at Hummel, for taking me in and supporting me throughout this extraordinary transformation period. He is the best CEO in the world. I appreciate all the support and understanding that Henning Nielsen, CMO at Hummel, showed me as a boss, especially when I spent time away from the office to work on research. I look forward to working even more closely together in the future. Thanks to Simon Schøilin, CSO at Hummel, for being the villain in my transformation fairytale. I have learnt a lot from all the discussions and look forward to continuing the journey together. Finally, I'm grateful that the owner of Hummel, Christian Stadil, has shown such a tremendous support to the project.

My thanks also go to my beloved team at Hummel. None of this would have been possible if you had not all been individual digital experts, omnipresent (transfunctional) and omnipotent (unstoppable). You can work wonders. I'm proud of all of you and greatly look forward to working fulltime with you in the near future. I also thank the entire team at Hummel for accepting me and my unusual work arrangement. You have shown me what Hummel is made of: team spirit, character, cheekiness and willpower. You understand carrying the load as a team – even when it seems impossible.

I would also like to thank Charlotte Lorenzen, my coach, for helping me realize that I should not give up my PhD after having given birth to my twin girls, but rather encouraging me to balance motherhood and a multifaceted career.

Special warm and grateful thanks to my family and friends for all their understanding and encouragement during the last years. Thank you for always believing in me. Especially my husband, Thomas. I could not have done any of this without you. I am so very grateful for having you as my wingman, both personally and professionally.

Sophia and Chloé, thank you for all your small hugs and kisses. Remember to always follow your curiosity and passion. I promise that I will try to be an example of that and I will always hold your hands when needed.

ABSTRACT

The emergence of the Internet, mobile devices and social media is revolutionizing the retail customer experience. Customers use multiple channels to maximize their shopping experience and they expect a seamless brand experience across all channels. These changes in customer technology capabilities drive the new IT capabilities required to support the expected seamless brand experience. To reach consumers and offer this experience, fashion brands must reconfigure their existing business resources and IT resources and align them with a new digital strategy with a view to deliver an integrated and coherent brand and shopping experience across channels and markets – also referred to as omnichannel retailing.

Our literature review reveals that there is little understanding of, indeed, little knowledge about, the development of an omnichannel retailing strategy or the transition from being a traditional B2B company to becoming a multichannel retailer, including the inherent IT challenges. Hence, the overall intent of this thesis is to document and understand how to align business and IT strategies for a global fashion brand in order to explain how to be successful in developing and implementing a digital strategy for omnichannel retailing.

The general analytical framework of the thesis is to maintain alignment between business strategy and IT strategy during the transition toward omnichannel retailing. This is investigated and analyzed via a survey of leading fashion brands over six years coupled with a longitudinal action research case over four years to document the transformation of the Danish sports fashion brand Hummel.

The thesis examines and explains the outcomes in four scientific papers. Each paper reports on the findings from an action research cycle. Collectively, the papers and the thesis detail Hummel's journey toward omnichannel, illustrating the structure and process of a global digital strategy for an omnichannel retailing company.

First, we describe the transformation of the business context within which Hummel competes, as well as the criteria for successful adoption of Internet presence by leading fashion brands.

Based on this, we provide a framework for different strategic options of Internet presence for branding and sales purposes. We then adopt a dynamic capability framework to analyze how to develop resources for this Internet presence. Illustrated by the Hummel case, we examine how the company reconfigured its resources specifically for B2C ecommerce in order to align with the new digital strategy. We describe the critical process in the strategic initiative to accomplish an omnichannel approach and analyze the shift in functional, structural and temporal alignment with the new digital strategy. Using Hummel as a case company, we empirically test a framework for multichannel marketing and sales, and extend this to an omnichannel retailing framework. Finally, we present the strategic digital initiatives illustrated by the Hummel case, and describe the development and implementation of the IT strategy required to support the digital strategy.

The research papers collectively explain how IT enabled this transformation, contributing to our understanding of digital strategy within business and IT strategic alignment in ecommerce. In particular, the thesis contributes to the emerging IS literature on multichannel and omnichannel strategies. In practice, the research supported Hummel's transformation, and it allowed us to theorize about potential guidelines for other fashion brands wishing to transform to become omnichannel retailers.

RESUMÉ – DANSK

Fremkomsten af internettet, mobile enheder og sociale medier revolutionerer kundeoplevelsen inden for retail. Forbrugere benytter mange forskellige marketing- og salgskanaler for at forbedre og forstærke deres købsoplevelser. Disse ændringer i forbrugernes teknologiske kapabiliteter stiller nye krav til IT-kapabiliteter for modebrands. For at nå ud til forbrugerne skal modebrands omlægge deres eksisterende virksomheds- og IT-ressourcer og justere dem efter en ny digital strategi med henblik på at levere en fuldstændig og sammenhængende brandoplevelse på tværs af kanaler - også kaldet omnichannel retail.

Vores litteraturgennemgang viser, at der er meget begrænset forståelse for, og endda næsten ingen viden om, det at udvikle en omnichannel retail strategi. Det samme gælder transformationsprocessen fra at være en traditionel B2B virksomhed til at blive en multikanal retailer - herunder de indlejrede IT-udfordringer. Formålet med denne afhandling er derfor at udvikle en forståelse for, hvordan et globalt modebrand tilpasser sine forretnings- og IT-strategier med henblik på at redegøre for, hvordan man opnår succes med at udvikle og implementere en digital omnichannel retail strategi.

Det overordnede analytiske framework for afhandlingen er at bevare overensstemmelsen mellem forretningsstrategi og IT-strategi i overgangen til omnichannel retail. Dette analyseres via en undersøgelse af førende modebrands' tilstedeværelse på internettet over en periode på seks år kombineret med en længerevarende aktionsforskningscase over fire år for at skildre sportsbrandet Hummels transformation.

Afhandlingen undersøger og forklarer resultaterne i fire videnskabelige artikler. Hver artikel præsenterer resultaterne fra en aktionsforskningsperiode. Tilsammen udvikler artiklerne og afhandlingen en forståelse for Hummels rejse mod omnichannel retail. Ydermere illustrerer de strukturen og processen bag en omnichannel virksomheds globale digitale strategi.

Vi beskriver først forandringen af den virksomhedskontekst, hvori Hummel konkurrerer, samt kriterierne for førende modebrands' succesfulde adaption af internet tilstedeværelse. På

baggrund af dette skaber vi et framework for forskellige strategiske muligheder for tilstedeværelse på internettet i branding og salgsøjemed. Vi adapterer derefter et dynamisk kapabilitetsframework og analyserer, hvordan man udvikler ressourcer i forbindelse med denne internet tilstedeværelse. Vi undersøger ved hjælp af Hummel casen, hvordan virksomheden omlægger sine ressourcer specifikt i forhold til B2C e-handel med henblik på at tilpasse sig den nye digitale strategi. Vi beskriver den kritiske proces i det strategiske initiativ for at opnå en omnichannel tilgang og analyserer skiftet i de funktionelle, strukturelle og tidsmæssige sammenhænge i forhold til den nye digitale strategi. Ved at benytte Hummel som casevirksomhed tester vi empirisk et framework til multikanal markedsføring og salg og udvider dette til et omnichannel retail framework. Afslutningsvis præsenterer vi de strategiske digitale initiativer illustreret via Hummel casen og beskriver udviklingen og implementeringen af IT-strategien, der er nødvendig for at understøtte den digitale strategi, hvormed salgs- og marketingkanaler integreres på tværs af geografiske markeder.

Tilsammen forklarer afhandlingen, inklusiv de videnskabelige artikler, hvordan IT muliggjorde omnichannel transformationen, og den bidrager især til vores forståelse af digital strategi inden for forretnings- og IT-strategisk tilpasning i e-handel. Afhandlingen bidrager til den spirende IS litteratur om multikanal og omnichannel retail strategier. I praksis understøtter forskningen Hummels udvikling fra B2B leverandør til omnichannel retailer, hvilket giver os mulighed for at teoretisere over potentielle retningslinjer for andre modebrands, der ønsker at blive omnichannel retailers.

TABLE OF CONTENTS

PART ONE

1. INTRODUCTION	15
1.1 Emergence of the Internet and Digital Strategy in the Fashion Industry	15
1.2 Structure of the Thesis	20
1.3 Research Papers Included in the Thesis	21
2. LITERATURE REVIEW	23
2.1 Methodology Applied for the Literature Review	23
2.2 Literature Investigated	25
2.3 Analysis of Papers	27
2.4 Multichannel Strategy	30
2.4.1 Multichannel Management	31
2.4.2 Multichannel Sales	32
2.4.3 Multichannel Branding	34
2.5 Research Gap in the Literature	35
3. RESEARCH QUESTION	37
3.1 Main Research Question	37
3.2 Research Sub-Questions	39
4. CASE COMPANY	42
4.1 Hummel's Background	42
4.2 The Challenges for Hummel	43
5. METHODOLOGY	46
5.1 Engaged Scholarship	46
5.2 Action Research	50
5.3 Criteria for Action Research at Hummel	53
5.3.1 Roles	53
5.3.2 Documentation	55
5.3.3 Control in Action Research	67
5.3.4 Usefulness	68
5.3.5 Theory/Frameworks	68
5.3.6 Transferability	69
5.4 Action Research Models	69
5.5 Action Research Cycles at Hummel	73
5.5.1 First Action Research Cycle: August 2010 – December 2010	78
5.5.2 Second Action Research Cycle: January 2011 – March 2012	83
5.5.3 Third Action Research Cycle: April 2012 – December 2013	93
5.5.4 Evaluation: January 2014 – December 2014	107
5.6 Reflections on the Role as an Insider Action Researcher	110
6. DISCUSSION	111
6.1 Introduction to the Research Papers	111
6.2 Synopsis of the Research Papers	114
6.2.1 Research Paper 1: Development in Web-presence of Fashion Brands: Adoption of Web 2.0	114
6.2.2 Research Paper 2: Aligning with New Digital Strategy: a Dynamic Capabilities Approach	117
6.2.3 Research Paper 3: Critical Challenges for Business and IT Alignment in Omnichannel Retailing	121

6.2.4 Research Paper 4: Hummel's Digital Transformation toward Omnichannel Retailing: Key Lessons Learned	125
7. CONTRIBUTIONS	129
7.1 Implications for Theory.....	129
7.1.1 Contributions from Action Research	129
7.1.2 Digital Strategy for Omnichannel Retailing	131
7.2 Implications for Practice	133
7.2.1 Organizational Contributions	133
7.2.2 Digital Strategy Contributions	139
7.2.3 Brand Strategy Contributions.....	142
7.2.4 What Can Other Companies Learn from the Hummel Case?	146
8. CONCLUSION	148
8.1 Overview of Results	148
8.2 Limitations	151
8.3 Future Research.....	153
8.4 Reflections and Epilogue	155
REFERENCES	159

PART TWO

Research Paper 1	166
Research Paper 2	188
Research Paper 3	226
Research Paper 4	278

APPENDICES

Appendix A: List of Papers Published During the PhD, which are not Included in the Thesis	296
Appendix B: Literature Review Details	297
Appendix C: Top Management Citations	304
Appendix D: Digital 2016 Targets and Plans	320

LIST OF FIGURES

Figure 1 Overall Research Design and the Position of the Four Research Papers.....	39
Figure 2 Alternative Forms of Engaged Scholarship.....	48
Figure 3 Excerpt from the Interview Record	59
Figure 4 An Example of a Reflection Note. Excerpt from 18.04.11	67
Figure 5 The Cyclical Process of Action Research.....	71
Figure 6 The Cyclical Process of Action Research at Hummel	72
Figure 7 Action Research Cycle Timeline in Hummel	75
Figure 8 Multichannel Model as Presented at the Sales Conference in May 2011.....	92
Figure 9 Multichannel Model as Presented at the Sales Conference in May 2013.....	106
Figure 10 CUBE Framework for Assessment of Websites	116
Figure 11 Model of Resource Reconfiguration and Dynamic Alignment for Digital Strategy	119
Figure 12 Omnichannel Characteristics.....	123
Figure 13 Key Thrusts in Hummel's Omnichannel Strategy	126
Figure 14 Hummel's Emerging Omnichannel IT and Data Infrastructure.....	127
Figure 16 Digital Targets 2016.....	321
Figure 17 Digital Plans 2016	322

LIST OF TABLES

Table 1 Overview of the Four Research Papers Included in this Thesis	21
Table 2 Journals Included in the Web of Science Search	27
Table 3 Research Method	29
Table 4 Multichannel Management, Sales and Branding Subject Category Papers.....	30
Table 5 Data Collection in Hummel.....	56
Table 6 Interviews Conducted.....	60
Table 7 Transcribed Interviews	61
Table 8 Action Research Models Culminating in the Hummel Model.....	70
Table 9 Summary of Phases in the Action Research Cycles at Hummel.....	75
Table 10 Overview of Research Papers, Research Sub-Questions, Method, Theory and Contributions	112
Table 11 8C Framework.....	115
Table 12 Multichannel Studies According to Journals.....	297
Table 13 Multichannel Studies According to Year of Publication	298
Table 14 Multichannel Studies According to Country.....	299
Table 15 Authors Involved in Publishing Multichannel Research	299
Table 16 Multichannel Studies According to Field of Interest	300
Table 17 Multichannel Papers Categorized per Subject.....	302
Table 18 Top Management Citations 2010-2014	304

1. INTRODUCTION

This introductory chapter aims to motivate the thesis, present the context of the study and outline the statement of problem and purpose. Thereafter, it details the structure of the thesis and finally presents the research papers included in the thesis.

1.1 Emergence of the Internet and Digital Strategy in the Fashion Industry

The emergence of the Internet, mobile devices and social media is revolutionizing the retail customer experience. The changes include enabling consumers to research and shop anytime, anywhere. The connected consumer uses multiple sources of brand and product information when she is browsing and shopping fashion products (Tuunainen and Rossi 2002).

These sources include Facebook, Instagram, Twitter and YouTube, product information and endorsements from blogger sites, price comparison and online review sites, pureplay and brick n' click websites, indoor touch displays, QR codes on print advertising, along with traditional touchpoints such as print magazines, stores and catalogues. Deloitte (2014) reports that customers are increasingly crossing channels and touchpoints in their shopping behaviors. More than 20% of customers follow brands on social media, 75% of customers browse and research online before they go into a physical store, and 56% use their mobile for shopping related searches, including when they are in a store.

In addition, customers frequently do "showrooming" - using physical stores as "showrooms" before purchasing online, often at a lower price. Forrester (2014) reports an increase in the range of customer expectations when shopping across multiple channels. For example, 71% of customers expect to view in-store inventory online, and 50% expect to buy online and pick up in-store.

To reach such connected consumers, fashion brands must reconfigure their existing business resources and IT resources, develop new business and IT resources, and decommission

redundant resources in order to transform their operations for success in the new retail reality. In addition, they must do this while running business as usual. While several fashion brands are developing these resources, one fashion brand in our study of 33 leading fashion brands¹ is generally seen by the industry to have not only successfully reconfigured and developed its strategic IT resources, but also aligned them with a new corporate business strategy with a view to delivering a seamless customer experience across channels (Webcredible 2012; Westerman et al. 2014) This is the iconic British brand, Burberry, which attributes part of its strong growth of 30% during the financial crisis to its digital innovation and integration of physical and digital to offer a seamless brand experience (Burberry annual report, 2012, p13).

The website, Burberry.com, enabled the company to achieve “more consistent brand projection across all customer touchpoints, leveraging its brand content to engage and connect consumers globally while still supporting retail sales as a global inventory pool” (Burberryplc.com). Christopher Baily, CEO and Creative Director at Burberry, described the interplay of social media channels and retail channels at a fashion show in September 2010: “We are now just as much a media-content company as we are a design company, because it is part of the overall brand experience” (Alexander 2010). In the Burberry 2014 Annual Report, the integration of the IT and physical platforms was highlighted as one of the brand’s five strategic themes: “Further integration of physical and digital platforms to enhance the brand experience across all touchpoints, from investments that leverage data and insight in the creation of increasingly personalized customer experiences, to more integrated, emotive storytelling across our online and offline worlds” (Burberry annual report, 2014, p4).

Aligning business strategy and information technology (IT) strategy is an important and enduring theoretical and practical challenge in the information systems (IS) field (see, for example, Luftman and Derksen (2012) Luftman and Kempaiah (2008). While there are extensive research findings showing that alignment between business and IT strategy is positively correlated with organizational performance (Gerow et al. 2014; Preston and Karahanna 2009; Tallon 2008; Yayla and Hu 2012), there is little agreement on the dimensions of IT alignment and the mechanisms by which they create value (Queiroz et al. 2012).

¹ See Research Paper 1 for more details, where we studied 33 fashion brands in total.

² Approximately 11% from online retailers, 13.5% from B2B ecommerce and 0.20% from B2C ecommerce

This lack of agreement is also true with respect to the success of the strategy at Burberry. The fashion industry acknowledges the critical role of IT in that success. However, our literature review reveals that there is little understanding of, indeed, little knowledge about, the strategy by which that success has been achieved.

The intent of this thesis is to document and understand how to align business and IT strategies for a global fashion brand. Essentially, the challenges identified are to explain how to be as successful in developing and implementing a digital strategy for omnichannel as Burberry, and to theorize about how others could achieve this goal. To do this, we specifically take a brand owner's perspective on omnichannel strategy and leadership development with the purpose of creating a coherent brand expression across channels and markets.

To analyze how to align business and IT strategies for a global fashion brand, we analyze a longitudinal action research case study of the Danish sport-fashion brand, Hummel, between 2010 and 2014. The study focuses on top management strategizing to examine and understand the requirements to develop a digital strategy for omnichannel retailing.

In 2010, an internal investigation of the Hummel websites around the world revealed a chaotic situation, with the 22 local Hummel websites featuring different designs, logos, brand stories and products. In every country, multiple variations on the Hummel brand were marketed side by side on websites and social media. This diluted the brand, confused the consumers and threatened the brand's long-term growth.

There was an urgent need to align and control the brand. The Hummel CEO stated: "We need to take control of the food chain. Create a central site and make sure that we get all Hummel partners under the same umbrella" (31 Aug, 2010). The CEO wanted to create end-consumer interaction and sales. To do this, Hummel had to align the brand across countries, partners and platforms with a digital strategy that integrated channels, social media and ecommerce. For this, having the right IT infrastructure and capabilities was critical.

The CEO endorsed a three-fold IT strategy:

1. align the IT systems with the new B2C business strategy,
2. align the IT platform relationship between the Head Office (corporate) and the countries (small business units) and
3. align the business and IT strategy one step at a time (incremental change) and develop the resources required to realize the new digital business strategy.

For Hummel, building a global IT platform with local applications was just the beginning. The company wanted to offer an aligned brand experience across all channels; because consumers did not think about channels, they responded to the total brand experience (Keller 2010). Therefore, Hummel began to develop a multichannel business strategy, along with the IT strategy, digital strategy and IT infrastructure to support it.

In 2012, after careful deliberation, Hummel took its first steps in building its Business-to-Consumer (B2C) business, piloting ecommerce on a new global website in its home markets of Denmark and Germany. In 2013, after 90 years of operating an exclusive Business-to-Business (B2B) strategy, the company rolled out full B2C ecommerce in Germany with a plan to roll it out successively in other countries. Hummel also launched its own stores and “shop in shops.” In 2014, Hummel began to integrate the stores and the ecommerce business. It changed its organizational structure to be more consumer centric, with a holistic brand presence across its online and offline channels. Collectively, this represented an omnichannel strategy, defined as being customer centric rather than channel centric (Brynjolfsson et al. 2013), offering a coherent and seamless brand and shopping experience across channels (Hansen and Sia 2015).

This transformation of Hummel had four outcomes: 1. a stronger and more coherent brand, 2. more corporate control to drive brand alignment locally, 3. an organizational restructuring to enable the digital strategy and 4. an increase in turnover of sales through digital channels from 5% of total sales in 2010 to 24.5% in 2014². These four outcomes are critically dependent on

² Approximately 11% from online retailers, 13.5% from B2B ecommerce and 0.20% from B2C ecommerce

the alignment between the new IT and business resources and the omnichannel brand strategy.

This thesis examines and explains these outcomes in four scientific papers. Each paper reports on the findings from an action research cycle. Collectively, the papers explain how Hummel transformed from being a single-channel sport-fashion supplier before 2010 to becoming a multichannel retailer in 2012. In 2014, it changed again, taking the initial steps to become an omnichannel retailer. Specifically, the four papers document the IS transition from a singlechannel business strategy to an omnichannel business strategy.

The first paper describes the transformation of the business context within which Hummel competes. Specifically, it describes the criteria for successful adoption of the Internet by the fashion industry from 2006 to 2012. The paper provides a framework for different strategic options of Internet presence for branding and sales purposes.

The second paper adopts a dynamic capability framework to analyze how to develop resources for this Internet presence. Illustrated by the Hummel case, the paper examines how the company reconfigured its resources for B2C ecommerce and digitalization. In the 1990s and 2000s, Hummel was a successful sports-fashion brand. The company enjoyed the benefits of alignment between its IT strategy and its business strategy. The major threat to, and opportunity for, increasing this success was the emergence of Internet-based competition.

The third paper describes the critical process to accomplish an omnichannel approach. It focuses on how a company engaging in omnichannel retailing is going to compete differently than before. Each channel operates independently in a multichannel organization, whereas an omnichannel organization must integrate channel operations to provide a seamless brand and shopping experience. A consequence of this shift is that it changes the requirements for IT governance, IT competence and IT flexibility.

The fourth paper presents the strategic digital initiatives illustrated by the Hummel case as the company launched its omnichannel strategy in 2013. The paper describes the development

and implementation of the IT strategy required to support the business strategy, integrating sales and marketing channels across geographical markets.

The papers collectively explain how IT enabled this transformation, contributing to our understanding of digital strategy within business and IT strategic alignment in ecommerce. In particular, the thesis contributes to the emerging IS literature on multichannel and omnichannel strategies. In practice, the research supported Hummel's transformation, and it allowed us to theorize about potential guidelines for other fashion brands wishing to transform to become omnichannel retailers.

1.2 Structure of the Thesis

The thesis is structured in two parts: the first is a cover paper that motivates and summarizes the papers. The second part presents the four research papers outlined in Table 1. Together, the two parts fulfill the requirements for an Industrial PhD thesis at CBS.

This cover paper explains the complementary relationships and synergies among the four papers using the business and IT strategic alignment framework. It synthesizes the key findings from the papers, showing how the thesis as a whole contributes to theory and practice to satisfy the ITM dissertation guidelines. The cover paper introduces the research problem area, reviews the relevant literature and details the research methods used to answer the research questions. It provides a short overview of each paper's findings, followed by a discussion of the results, contributions and concluding comments on the new phenomenon of an omnichannel brand strategy and the required digital strategy with which to implement it.

The remainder of the cover paper is structured as follows:

- Chapter 2 provides an overview of the limited omnichannel literature. It documents a systematic review of multichannel literature published until 2014. This identifies the gaps in that literature to which this thesis contributes.
- Chapter 3 frames the general research question and the specific research questions that are addressed in each of the four papers.

- Chapter 4 describes the case study of Hummel, focusing on the challenges contingent on the digitalization.
- Chapter 5 describes the research design and reflects upon the methodological choices made during the action research cycles that comprise this thesis.
- Chapter 6 provides a synopsis of the four research papers. It discusses the major findings and their contributions to the research question.
- Chapter 7 presents the implications of the findings for theory and practice.
- Chapter 8 concludes and provides suggestions for further research. It also covers the possible threats to validity of the findings. Finally, it details a personal reflection on the journey as a PhD student and the future as Head of Global Marketing and Omnichannel at Hummel.

1.3 Research Papers Included in the Thesis

The second part of the thesis presents the four research papers outlined in Table 1. Two of the four papers have been published in peer-reviewed journals (Paper 1 in JTAER and Paper 4 in MISQE), one paper (Paper 2) is under review in a peer-reviewed journal (JSIS) and one paper (Paper 3) is unpublished at the time of submitting this thesis.

Table 1 Overview of the Four Research Papers Included in this Thesis

No	Paper Title	Authors	Publication Details
1	Cube Assessment Framework for B2C Websites Applied in a Longitudinal Study in the Luxury Fashion Industry	Rina Hansen Niels Bjørn-Andersen	Journal of Theoretical and Applied Electronic Commerce (JTAER), vol. 8 issue 2, August 2013, pp. 1-20 <i>Submitted 29th Mar 2012. Revise and resubmit Re-submitted 16th Nov 2012 Accepted 9th Jan 2013 Published Aug 2013</i>
2	Aligning with New Digital Strategy: a Dynamic Capabilities Approach	Rina Hansen Adrian Yeow Christina Soh	Journal of Strategic Information Systems (JSIS) <i>Submitted 12th Feb 2015. Revise and resubmit</i>
3	Critical Challenges for IT and Business Alignment in Omnichannel Retailing	Rina Hansen	Outlet to be confirmed <i>Not submitted at the time of thesis submission</i>
4	Hummel's Digital Transformation toward Omnichannel Retailing:	Rina Hansen Siew Kien Sia	Management Information Systems Quarterly Executive (MISQE)

	Key Lessons Learned		<i>Submitted 4th April 2014. Revise and resubmit</i> <i>Re-submitted 12th Aug 2014. Revise and resubmit</i> <i>Re-submitted 26th Nov 2014</i> <i>Accepted 2nd Dec 2014</i> <i>Published June 2015</i>
--	---------------------	--	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

2. LITERATURE REVIEW

In this chapter, a review of prior relevant literature is conducted. First, the method for conducting the literature review is presented. Second, the relevant literature is outlined. Third, an analysis of the selected papers is undertaken and finally, a research gap in the literature is explained.

2.1 Methodology Applied for the Literature Review

A comprehensive and systematic review of the literature pertaining to Information Systems (IS) and marketing multi- and omnichannel research was conducted in order to ascertain the current 'state of play' of the field along a number of dimensions, thereby identifying knowledge gaps worthy of investigation and issues previously not adequately investigated. The literature review covers the contemporary development and understanding of the relationship between multichannel strategy and IT strategy in B2C ecommerce transformation during the past two decades. In the words of Webster and Watson (2002): *"A review of prior, relevant literature is an essential feature of any academic project. An effective review creates a firm foundation for advancing knowledge. It facilitates theory development, closes areas where a plethora of research exists, and uncovers areas where research is needed"* (p.13).

We commenced the structured literature review searching for "omnichannel" but found only one paper identifying the omnichannel brand strategy and IT until 2014 (Brynjolfsson et al. 2013). We thus extended the literature search to include the wider multichannel concept, thereby identifying a major gap in the wider literature on multi – and omnichannel and IT strategic alignment, where multichannel strategy is defined as the set of activities involved in communicating with, and selling, merchandise to consumers through more than one channel (Zhang et al. 2010) and omnichannel strategy is defined as being customer centric rather than channel centric (Brynjolfsson et al. 2013). It offers a coherent and seamless brand and shopping experience across channels (Hansen and Sia 2015). The other major gap revealed by the literature review is the emphasis on marketing strategy to the partial exclusion of IT strategy in the wider multichannel research.

The literature review is structured around the ten investigative steps identified by Williams et al. (2009):

1. Identifying the journals publishing papers on multichannel.
2. Presenting the general trends on multichannel research according to the year of publication.
3. Determining countries (and hence areas of greatest activity) with the largest number of publications on IS/IT and marketing multichannel.
4. Finding authors active in the area of IS/IT and marketing multichannel.
5. Distinguishing the various fields of interest in IS/IT and marketing multichannel research.
6. Classifying multichannel publications on the basis of their use of primary research data (empirical and non-empirical).
7. Selecting multichannel publications on the basis of the nature of primary research data (quantitative and qualitative).
8. Designating multichannel publications according to the research methods employed.
9. Exploring and identifying the various channels examined.
10. Examining the subjects and theories utilized when studying multichannel within various contexts.

Adopting this methodology, the thesis identifies the gaps in best practice and cutting edge theory to resolve the challenges at Hummel to design and develop the IT resources to implement its two-stage IT strategy. Stage one was to develop the IT resources to support a multichannel strategy; stage two is to transform the multichannel strategy into an omnichannel strategy.

A coherent review is required to both identify the gaps and to show how Hummel's solutions contribute to theory and practice. A coherent review emerges only from a conceptual structuring of the topic itself (Bem, 1995, p.172 in Webster and Watson, 2002). The ten steps identified by Williams et al. (2009) provide this structure. Importantly, this review

methodology is also compatible with the research methodology adopted for this thesis that draws on Van de Ven's (2007) 'engaged scholarship' to guide the action research methodology.

2.2 Literature Investigated

We adopted the academic journal database, Web of Science, provided by Thomson Scientific (www.webofknowledge.com). This database includes the majority of high-ranking IS/IT and marketing journals in its Science Citation Index or within the Social Science Citation Index. Restricting the search to a single publication database simplified the search process with little or no loss of coverage.

To identify publications specific to the multichannel topic, the two search terms 'multichannel' and 'multi-channel' were adopted.

We used Webster and Watson's (2002) and Williams et al.'s (2009) protocols for a structured approach to identify journals, identify papers and refine the source material for the review:

1. As the major contributions are likely to be in the leading journals (Webster and Watson 2002), we took the basket of eight within the IS field as our initial starting point. These are Management Information Systems, Information Systems Research, Journal of the Association for Information Systems, Information Systems Journal, Journal of Management Information, European Journal of Information Systems, Journal of Strategic Information Systems, and Journal of Information Technology.
2. We then searched backwards by reviewing the citations for the papers identified in step 1 and in preliminary research conducted on various databases and Google scholar. This identified the following relevant publications: Journal of Interactive Marketing, Marketing Science, Management Science, Journal of Retailing, Journal of Marketing and International Journal of Electronic Commerce.
3. We then searched forward in the Web of Science, identifying papers citing the key papers in the previous search.
4. This produced a total of 28,729 results from Web of Science. From these, we excluded papers in photo optical, physics, medicine, and other topics not relevant to or

associated with the systems/technology, marketing/communication and business fields. We further refined the search by:

- a. Restricting the search to articles.
- b. Refining the research area to include only computer science, science technology, communication, business economics, and social sciences and other topics. This gave 2,041 results.
- c. Refining these by Web of Science categories to include only computer science information systems, business, management and communication. This gave 796 results.
- d. Refining these by searching for the word “Internet” in the papers, given our focus in the multichannel field is on the role of the Internet. This gave 102 results.
- e. Refining the journals to the ones that had published the topic “multichannel” more than once. This resulted in a further 14 publications: Industrial Marketing Management, Journal of the Academy of Marketing Science, European Journal of Marketing, Journal of Service Research, Computer Communications, Electronic Commerce Research and Applications, International Journal of Research in Marketing, Internet Research or Journal of Business Research, Journal of Marketing research, Multimedia Tools and Applications, Online Information Review, Service Industries Journal, MIT Sloan Management Review.

This structured approach identified a final list of 28 journals presented in Table 2. The final search for the term “multichannel” was restricted to these 28 journals and to the years 1995-2013. While the primary search was focused within the IS/ICT field, we included the relevant marketing and retail papers, as Watson and Webster (2002) note, *“Because IS is an interdisciplinary field straddling other disciplines, you must look not only within the IS discipline when reviewing and developing theory but also outside the field”* (p16). The final list comprised 68 papers, which we analyzed further.

Table 2 Journals Included in the Web of Science Search

IS/ICT journals	Marketing journals	Other
MIS Quarterly	Journal of Interactive Marketing	Journal of Retailing
Information Systems Research	Journal of Marketing	Management Science
Journal of the Association for Information Systems	Marketing Science	Journal of Service Research
Information Systems Journal	Industrial Marketing Management	Internet Research
Journal of Management Information Systems	Journal of the Academy of Marketing Science	Journal of Business Research
European Journal of Information Systems	European Journal of Marketing	Multimedia Tools and Applications
Journal of Strategic Information Systems	International Journal of Research in Marketing	Online Information Review
Journal of Information Technology	Journal of Marketing research	Service Industries Journal
Computer Communications		MIT Sloan Management Review
Electronic Commerce Research and Applications		
International journal of electronic commerce		

The literature search in the 28 peer-reviewed journals during the period (1995–2013) identified 68 papers, and a number of analyses were conducted on the search output employing the tools available in the Web of Sciences. Count and percentage data were generated for the assorted variables utilized to categorize the search output according to Williams et al.'s (2009) ten investigative steps.

2.3 Analysis of Papers

Not all of the 68 papers identified are included in the conceptual analysis. Papers with no relevance to multichannel retailing were excluded (i.e., papers on computer networks, systems and programs). In addition, eight papers exclusively on pricing and nine papers on the service field (such as online services and banking) were excluded because our interest is multichannel retailing of physical products, such as consumer goods and specifically fashion goods. Hence 45 papers, in total, were considered for our conceptual analysis (see Table 17 and Figure 15 in Appendix B).

Details of the first five investigative steps of the systematic literature review identified by Williams et al. (2009) are listed in Appendix B. Steps 6 - 10 (6. Classification of multichannel

publications on the basis of their use of primary research data (empirical vs non-empirical); 7. Classification of multichannel publications on the basis of nature of primary research data (quantitative and qualitative); 8. Classification of multichannel publications according to the research methods employed; 9. Identification of the various channels examined; and 10. Exploration of the subjects and theories utilized when examining multichannel within various contexts), are described below.

To complement Williams et al.'s (2009) steps 6-10, a detailed manual analysis based on Webster and Watson's (2002) concept-centric framework was conducted to extract various items of information that could not be obtained directly from the Web of Sciences database. To do this, we examined each abstract and paper identified in the search to obtain and record information, including the unit or level of analysis, the research paradigm, the primary data and the form of technology examined.

Step 6: Classification of primary research data: empirical vs non-empirical

A large proportion of the 45 papers considered during our in-depth investigation was empirical in nature (26 papers). Eighteen papers were non-empirical; one paper could not be classified.

Step 7: Classification of primary research data: quantitative vs qualitative

The quantitative approach has dominated the multichannel research within the IS and marketing field. Twenty-five papers employed a quantitative approach; in comparison, only three papers employed a qualitative approach.

Step 8: Classification of research methods employed

Table 3 reports that seven different research methods were employed in the selected 45 papers. Thirteen papers employed survey methods (including surveys of datasets) and 12 papers used literature analysis. Other approaches included mathematical models (eight papers), case study (four papers), conceptual analysis (four papers), one paper used field experiment and one content analysis.

Table 3 Research Method

Research method	Count
Survey	13
Literature analysis	12
Mathematical model	8
Case study	4
Conceptual	4
Field experiment	1
Content analysis	1
Not known	2
Total	45

Step 9: Identification of channels examined

Our analysis of the selected 45 papers shows that most papers examine the online channel (95%) (i.e., ecommerce via pure-players and/or via the online store of a multichannel retailer), followed by offline (74%) (i.e., physical stores, telephone service or sales agents). A few papers included catalogue (10%) and mobile (8%) channels in their research. None of the papers examined social media sales channels such as Facebook or YouTube.

Furthermore, the results of the in-depth exploration into the most common perspective indicate that the majority of 45 papers (28 papers) examined multichannel issues from a channel management perspective, focusing on conflict, synergy or the optimal channel mix. This was followed by studies focusing upon the consumer perspective (24 papers), company perspective (22 papers), retail focus (17 papers), multichannel related strategy (20 papers), marketing and communication (16 papers) and branding (3 papers).

Given our interest in the fashion industry, we note that only one paper analyzed fashion brands (see Rowley (2009)), while two papers had an empirical sample from the apparel (clothes) industry (see Ansari (2008) and Venkatesan (2007)).

Step 10: Multichannel papers according to subjects and theories

Our concept-centric analysis revealed nine major subject categories. Figure 15 and Table 17 in Appendix B reports that Multichannel Sales (nine papers) emerged as the most frequent subject within our 45 selected papers on multichannel research. This is followed by Multichannel Customer Management (eight papers), Multichannel Management (four papers),

Marketing (five papers), CRM (four papers) and Customer Behavior (three papers). Multichannel Branding was analyzed by three papers, and Customer Lifetime Value was analyzed by two papers, while the last eight papers were analyzed on either Service, Trust and Profit or other subjects, including Ecommerce Performance, Supply Chain Management and Online Sales Assistance.

The large number of subjects analyzed demonstrates the diversity of research on multichannel in the IS and marketing literature. There is no agreement on a dominant approach. Multichannel is still an emergent literature stream.

2.4 Multichannel Strategy

Given that the intent of this thesis, as explained in the introduction, is to document and understand how to align business and IT strategies for a global fashion brand, and specifically taking a brand owner's perspective on omnichannel strategy development with the purpose of creating a coherent brand expression across channels and markets, three of the nine subjects are especially critical for our research. These are Multichannel Management, Multichannel Sales and Multichannel Branding. The other subjects either take a customer perspective (customer behavior or customer relationship management) or focus on a specific dimension of multichannel (e.g., ecommerce performance, marketing, service, trust and supply chain) as opposed to overall multichannel strategy development.

These three primary subject areas comprised 16 out of the 45 papers analyzed (see Table 4). To further understand these three domains, we conducted a more detailed literature review below.

Table 4 Multichannel Management, Sales and Branding Subject Category Papers

Subject	Paper
Multichannel Management	Bang et al., 2013, Channel Capabilities, Product Characteristics, and the Impacts of Mobile Channel Introduction. <i>Journal of Management Information Systems</i> Zhang, 2010, Crafting Integrated Multichannel Retailing Strategies. <i>Journal of Interactive Marketing</i> Sharma, 2007, Choosing an optimal channel mix in multichannel environments. <i>Industrial Marketing Management</i> Sparks, 2003, A catalogue of success? Argos and catalogue showroom retailing. <i>Service Industries Journal</i>

Multichannel Sales	<p>Chung, 2012, Manufacturers' reliance on channel intermediaries: Value drivers in the presence of a direct web channel. <i>Industrial Marketing Management</i></p> <p>Avery, 2012, Adding Bricks to Clicks: Predicting the Patterns of Cross-Channel Elasticities Over Time. <i>Journal of Marketing</i></p> <p>Yan, 2011, Managing channel coordination in a multi-channel manufacturer-retailer supply chain. <i>Industrial Marketing Management</i></p> <p>Van Bruggen, 2010, Managing Marketing Channel Multiplicity. <i>Journal of Service Research</i></p> <p>Webb, 2007, Internal multi-channel conflict: An exploratory investigation and conceptual framework. <i>Industrial Marketing Management</i></p> <p>Rosenbloom, 2007, Multi-channel strategy in business-to-business markets: Prospects and problems. <i>Industrial Marketing Management</i></p> <p>Bendoly, 2005, Online/in-store integration and customer retention. <i>Journal of Service Research</i></p> <p>Riggins, 2005, A multichannel model of separating equilibrium in the face of the digital divide. <i>Journal of Management Information Systems</i></p> <p>Webb, 2002, Managing channels of distribution in the age of electronic commerce. <i>Industrial Marketing Management</i></p>
Multichannel Branding	<p>Keller, 2010, Brand Equity Management in a Multichannel, Multimedia Retail Environment. <i>Journal of interactive Marketing</i></p> <p>Rowley, 2009, Online branding strategies of UK fashion retailers. <i>Internet research</i></p> <p>Kwon, 2009, Reciprocal Effects Between Multichannel Retailers' Offline and Online Brand Images. <i>Journal of Retailing and Services</i></p>

2.4.1 Multichannel Management

The multichannel management literature examines how to design an optimal channel strategy across retail channels and touch points. The literature assumes that multichannel retail will become universal practice in the near future. However, the way in which companies strategize for, and conduct, multichannel retailing will vary (Sharma and Mehrotra 2007; Sparks 2003; Zhang et al. 2010).

The key challenges to implement multichannel retailing include: the motivations and constraints of going multichannel, the challenges of crafting multichannel retailing strategies, and opportunities for creating synergies across channels. Retailers will face different challenges. The major common challenge facing all multichannel retailers is creating the appropriate organizational structure (Zhang et al. 2010).

Sharma and Mehrotra (2007) develop a six-step framework that includes determining the coverage of each channel, profitability, optimal number of channels, developing decision rules based on coverage and potential conflict, identifying strategic channels that cannot be abandoned, and implementing optimal channel strategy. While the multichannel strategy might differ for each retailer, it is fundamental that the strategy is based on giving consumers every opportunity to both contact the business and to purchase, collect or have the product delivered across all channels (Sparks 2003). Retailers must ensure that all channels work together in a synergistic way so that the result is greater than the sum of each channel operating on its own.

2.4.2 Multichannel Sales

The multichannel sales management literature examines the issue of channel cannibalization versus synergy, and the management of multiple channels of distributions. The literature suggests that multichannel “go-to-market” is fast becoming the norm in the business-to-business sector, as customers demand more channel options to gain access to products. The task of coordinating and integrating multiple sales channels that operate at high levels of efficiency has forced the managers responsible for channel management to deal with a variety of challenging issues (Rosenbloom 2007). These include the role of ecommerce in the multichannel structure, finding an optimal channel mix, creating synergies across channels, building strategic alliances, creating sustainable competitive advantages, managing more complex supply chains, dealing with internal and external conflict, and providing the leadership necessary to attain well integrated multiple channels.

The greatest challenge discussed in the multichannel sales literature is sales cannibalization (Avery et al. 2012; Chung et al. 2012; Riggins 2004; Van Bruggen et al. 2010; Webb 2002; Webb and Lambe 2007; Yan 2011). Researchers suggest six approaches to manage this threat. First, B2B companies should sell differentiated products in each channel. This alleviates channel conflicts between manufacturer and retailer. This is especially the case when profit sharing mechanisms are also employed (Yan 2011). However, this suggestion is incompatible with having a consumer centric view and fulfilling consumer demands of seamless access to products across channels (Bendoly et al. 2005; Rosenbloom 2007; Van Bruggen et al. 2010).

Second, researchers propose that retailers should use different channels to market their products to different market segments, for example, using a website and a bricks-and-mortar store. The digital divide where high-end consumers dominate the online channel and low-end consumers dominate the offline channel artificially segments the marketplace. This mitigates the classic cannibalization problem, allowing the retailer to more efficiently market goods to each consumer segment (Riggins 2004). However, this proposition is also incompatible with having a consumer centric view and fulfilling the consumer demands of having seamless access to products across channels (Bendoly et al. 2005; Rosenbloom 2007; Van Bruggen et al. 2010). In addition, research shows that multichannel customers are more valuable than are single-

channel customers. Customers purchase more from the retailer in the long-term when they have more integrated channel options (Avery et al. 2012; Bendoly et al. 2005; Chung et al. 2012).

Third, research examines the specific question of how to add another channel to an existing multichannel mix. See, for example, Chung et al. (2012), who examine the effect of a manufacturer (B2B) adding an Internet sales channel to its network of intermediaries. The authors found that when manufacturers launch ecommerce reliance on intermediaries increases; as is also the case when the intermediaries launch ecommerce. Manufacturers' reliance on intermediaries only decreases when the manufacturers' ecommerce sites can perform the same functions as do the intermediaries.

Fourth, research examines whether the introduction of a new retail store channel creates synergy or cannibalizes sales in existing channels for a B2C retailer. Avery et al. (2012) report that the launch of a retail store decreases sales in the catalogue channel but not in the Internet channel in the short term. Critically, sales increase in both catalogue and Internet channels over time. The authors conclude that both the type of channel being added and the composition of the existing channels in the retailer's channel mix do matter because different channels have different capabilities.

Fifth, research examines the effect of introducing the Internet channel into an already complex, multichannel distribution system from the perspective of a supplier firm (Webb 2002). In this case, strategies are needed for proactively managing conflict, both externally with channel partners and internally among the departments responsible for managing the channels. The latter includes ensuring that channel management groups, documentation of channel strategies and superordinate goals are aligned.

Sixth, Webb and Lambe (2007) study channel conflict. They examine internal conflict among the groups and individuals responsible for multichannel management within B2B organizations. They show that internal and external multichannel conflicts are closely interrelated. Conflict can be moderated if the company engages in multichannel integration

behavior, including ensuring superordinate goals, internal coordination and communication. Interestingly, they also find that channel conflict can be constructive when channel efficiency increases, which is especially seen in mature multichannel companies.

Focusing on designing and managing channel synergies instead of channel cannibalization, research shows that the emergence of channel multiplicity does not lead to channel conflict when the channel members and functions are organized to improve the overall performance of the channel system. Customer needs should be the guiding principle of channel functions and management. Without the ability to provide customers the right products at the right place and time, the concept of channel management is irrelevant (Van Bruggen et al. 2010). To focus on the coherent consumer experience across channels, companies must: 1. increase transparency in the channel integrations through practical initiatives (including clear links to stores on the website, advertisement of the website in the stores, accessible website kiosks in the stores), 2. have knowledgeable and helpful staff regarding the website in the store, 3. provide information regarding the list of goods offered at specific stores through their websites, and 4. allow returns and pick-up across the channels. These efforts affect customer purchase decisions and increase of customer retention rates (Bendoly et al. 2005).

In summary, the multichannel sales literature highlights the complexity of cannibalization in multichannel retailing. Nevertheless, it concludes that in order to create synergies rather than cannibalization, it is paramount for retailers to integrate channels and to ensure coordination and transparency between channels, both internally and externally. This should be done with the consumer in mind, as the notion of channel management boils down to providing consumers with the right products at the right time and place.

2.4.3 Multichannel Branding

The multichannel branding literature examines the use of multiple channels to engage with customers to determine how synergies and conflicts across multiple channels affect brand value. Specifically, multichannel and multimedia retail marketing environments present a number of brand management challenges, which suggests that marketers must design and implement an integrated channel and communications strategy that maximizes short-run sales

and long-run brand equity. In this way, the whole becomes greater than the sum of the parts (Keller 2010).

Keller (2010) states that winning channel strategies are likely to be those offering customers integrated shopping experiences that skillfully “mix and match” direct and indirect channels via physical stores, Internet, telephone, catalogs, and so forth. This is supported by Kwon and Lennon (2009). The authors show that consumer experience in one channel affects the brand image in another channel. They conclude that retailers must present a seamless integration between offline and online operations. Otherwise, performance is less than the sum of the parts. In addition, research shows that offering transactional facilities on the brand’s website supports brand building in general. Brands with a transactional website offer greater opportunity for interaction with consumers than do brands without a transactional website (Rowley 2009). Retailers must present a seamless integration between offline and online operations toward consumers because consumers do not separate channel communication but perceive brand communication holistically.

2.5 Research Gap in the Literature

The multichannel strategy research literature, which in our definition encompasses multichannel management, multichannel sales and multichannel branding, is one component of the context to which this thesis contributes. However, this extant research does not discuss or investigate the development of a multichannel retailer, the transition from being a traditional B2B company to becoming a multichannel retailer, nor the IT challenges contingent on moving from a singlechannel strategy to a multichannel strategy.

These are the challenges faced by many traditional B2B fashion companies, since consumers expect companies to transform into multichannel retailers with digital connections as the glue between channels (Keller 2010; Riley and Lacroix 2003; Seringhaus 2005; Siddiqui et al. 2003; Van Bruggen et al. 2010; Zhang et al. 2010). Critically, there is limited research on the role of IT in this transition. More specifically, we have limited knowledge about the IT challenges

contingent on moving from a single channel strategy to a multichannel strategy, and then to an omnichannel strategy.

Only seven papers of the total 45 papers are published in IS journals (Bang et al. 2013; Berendt et al. 2008; Chiu et al. 2010; Kuruzovich et al. 2008; Riggins 2004; Rowley 2009; Wade and Nevo 2006). Furthermore, only two of the 16 papers in our focal subject areas of multichannel management, multichannel sales and multichannel branding are published in IS journals (Bang et al. 2013; Riggins 2004). These two papers reference few IS references in their literature lists. Riggins (2004) includes no IS references; instead, he draws on marketing and management literatures. Bang et al. (2013) include a few IS references. Both papers mainly reference the marketing literature.

This literature review identifies a major gap in the IS literature: the absence of research on the role of IT in the transition from a single channel to a multichannel strategy. The major contribution of this thesis is to begin to address this gap with implications for both theory and practice. These are examined in the Discussion Chapter of this cover paper and in each of the four research papers.

This literature review also reveals that only three papers of the selected 45 multichannel papers in our literature review use qualitative research methods, and, of these, no paper employs action research. Instead, approximately half of the papers are conceptual papers. This is consistent with multichannel being a new research domain; hence, there is limited research on the theory and practice in organizations. We extend this limited extant literature in our case analysis in Paper 3, develop new frameworks in Paper 2, and contribute to a deeper understanding of the subject area through our action research methodology, which is explicated in the Methodology section of this cover paper.

3. RESEARCH QUESTION

This chapter proceeds as follows. First, the intent of the thesis is outlined and the main research question is presented. Following, the general analytical framework and research design is explained. Second, four sub-research questions are presented and finally the boundaries for this research are defined.

3.1 Main Research Question

The overall intent of this research is to document and understand how to develop a digital strategy to support an omnichannel business strategy by aligning business and IT strategies for a global fashion brand. To do this, we investigated how Hummel transformed from a singlechannel B2B supplier to a B2C multichannel company and, further, how the organization began to implement its omnichannel retailing strategy.

Based on the literature search above, we found that there is limited research on multichannel retailing. Accordingly, the literature gave us limited theoretical help to develop a digital strategy and to understand the inherent IT challenges of moving from a single channel strategy to a multichannel strategy, and then to an omnichannel strategy. Thus, the research question guiding this thesis is:

How can a fashion company develop and deploy a digital strategy for omnichannel retailing?

Four sub-research questions (S/RQs) will be introduced in the following section, but first, the different terms in the main research question is explained further here.

The term ‘fashion company’ refers to a company that sells its own branded apparel, footwear and accessories. Typical examples include Burberry, H&M and Nike (for further details see Paper 1).

The term ‘digital strategy’ refers to an organizational strategy formulated and executed by

leveraging digital resources to create value(Bharadwaj et al. 2013). Digital strategy is inherently transfunctional, going beyond treating IT as a function. Instead, it recognizes the pervasiveness of IT in other functions, including operations and marketing. All IT functional and process strategies are encompassed under the umbrella of digital business strategy with digital resources serving as the integrative glue(Bharadwaj et al. 2013). Hence, digital strategy implies a dynamic synchronization between business and IT to gain competitive advantage(Mithas et al. 2013).

Digital strategy is multi-dimensional and transfunctional because IT is essential to the framing of an overall business strategy, which is a fusion of IT and business strategies. This is in contrast to the traditional view of IT as a “functional level strategy that must be aligned with the firm’s business strategy” (Bharadwaj et al. 2013, p1). (For further details see Paper 2).

By the term ‘omnichannel retailing’, we refer to a consumer centric marketing and sales approach, which includes aligning and integrating online and offline sales and marketing channels in which the goal is to provide a flexible and seamless brand and shopping experience(Brynjolfsson et al. 2013; Hansen and Sia 2015). For brands, this implies developing an integrated view of the customer and integrating all brand, communication and sales activities to deliver a coherent brand experience across all channels (for further details, see Paper 3 and Paper 4).

The general analytical framework is to maintain alignment between the business strategy and IT strategy during the transition. This was investigated and analyzed via a survey of leading fashion brands over six years coupled with a longitudinal action research case over four years and four months.

Figure 1 shows how the four papers fit into the overall research design and relate to each of the action research cycles in Hummel’s transformation. Collectively, the papers present a coherent explanation of the transitions in Hummel’s IT and business resources from those required to support a singlechannel business strategy to those aligned with an omnichannel business strategy.

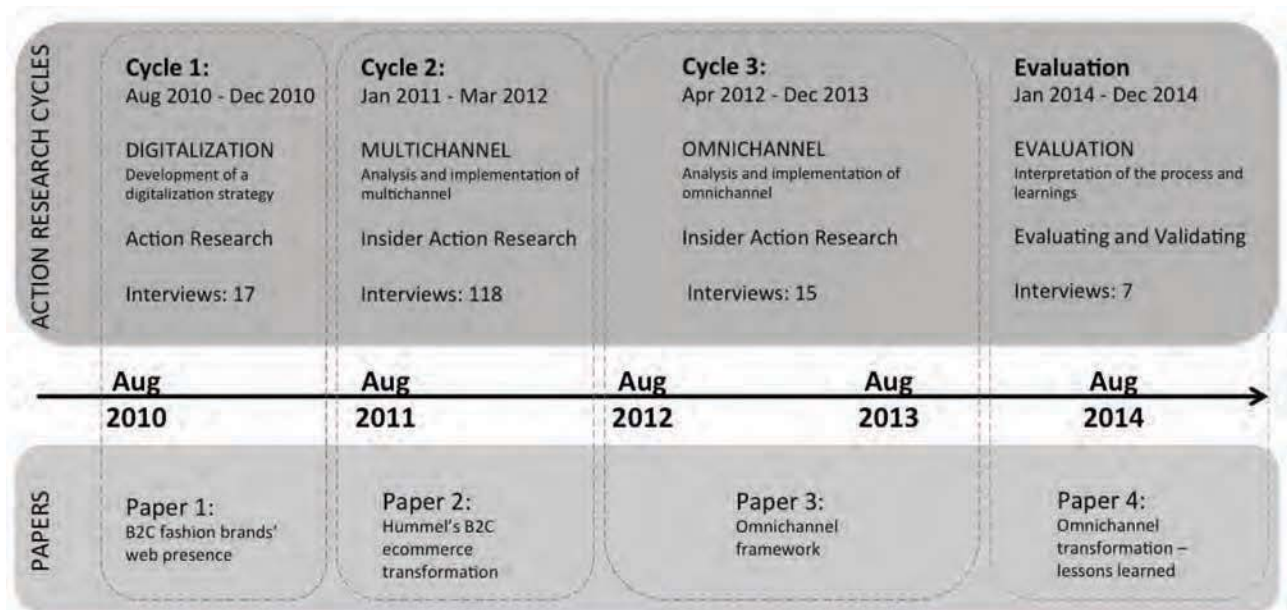


Figure 1 Overall Research Design and the Position of the Four Research Papers

3.2 Research Sub-Questions

The following provides an outline of the four research papers included in this thesis by specifying the contribution of each paper to the thesis and the research question it answers, which collectively begin to answer the overall research question above. This section also defines the boundaries for this research.

Sub-research question 1

Paper 1 documents the background knowledge and understanding in the literature of the effect on the fashion industry of marketing opportunities contingent on the widespread penetration of the Internet. The paper examines how leading fashion brands are using the Internet for sales and marketing purposes. Based on in-depth interviews with senior industry executives and observations of their website and Internet presence, the paper describes how ebusiness developed in the fashion industry over the six years, from 2006 to 2008, 2010 and 2012. It answers the research question:

S/RQ (1): How do fashion brands utilize their Internet presence for communication and commerce purposes?

Sub-research question 2

Paper 2 examines how Hummel developed its IT resources and business resources for B2C ecommerce, aligning them with the new digital strategy. Specifically, the paper explains how these resources were developed through leveraging existing resources, creating new resources, acquiring new resources and releasing resources temporally through the processes of Sensing, Seizing and Transforming capabilities. It answers the research question:

S/RQ (2): How can a fashion brand such as Hummel develop new IT and business resources to align with its new digital strategy?

Sub-research question 3

Paper 3 draws on the multichannel and business-IT alignment literature to develop an analytical framework within which to research Hummel's development of the IT resources required to implement its omnichannel initiatives. The paper investigates the application of a multichannel framework in Hummel and proposes how that analytical framework could be extended to both explain the effect on performance of IT within an omnichannel strategy and to provide guidelines for IT best practice. It answers the research question:

S/RQ (3): What are the critical IT challenges to be resolved at a fashion brand such as Hummel in the transition from multichannel to omnichannel retailing?

Sub-research question 4

Paper 4 is a chronological explanation of how Hummel's omnichannel business initiatives and IT transformations were managed. It offers lessons learned from the transformation processes and provides recommendations for omnichannel transformation in practice. To do this, it illustrates how organizations, particularly B2B players, can steer themselves forward as they: learn how to respond to the interests of their channel partners, recognize the deep organizational changes required, leverage the strategic role of the CDO and evolve the new CIO role to implement an omnichannel strategy. It answers the research question:

S/RQ (4): What are the general recommendations for omnichannel transformation in practice based on Hummel's learnings?

Collectively, these four sub-questions begin to explain how a fashion company can develop and deploy a digital strategy for omnichannel retailing. When beginning to develop a new theory, it is important to identify the boundary conditions (Weber 2003; 2012). The main research question and sub-questions are limited to developing a digital strategy for multi- and omnichannel retailing. We adopt the strategy level as defined by Bharadwaj (2013) and Mithas et al. (2013), rather than a detailed level of omnichannel retailing. By doing this, we exclude, for example, a detailed customer level analysis (customer relationship management, customer behavior), pricing discussions, payment and trust solutions, and supply chain challenges.

4. CASE COMPANY

This chapter presents the case company for the thesis. First, a background of the company is highlighted. Then, the challenges for the company are explained and finally, the consequent actions are outlined.

4.1 Hummel's Background

Hummel is one of the oldest sportswear brands in the world. It was founded in 1923 by a young shoemaker in Hamburg. The company survived two World Wars, including getting burned to the ground, before a Danish lawyer bought it in the late 1980s. At that time, the company was faced with a major financial crisis. Since then, under new leadership, Hummel has experienced 20% cumulative year-on-year growth (CAGR), making it one of the fastest growing sportswear brands in the industry.

Hummel's initial claim to fame was its creation in 1923 of one of the world's first football boots with cleats. These enabled footballers to play with stability on wet and slippery surfaces. Today, Hummel operates in the sport and lifestyle apparel, footwear and accessories market with an annual turnover of US\$240 million. The company is based in Aarhus, Denmark, with 130 employees, including the global teams responsible for design and product development, marketing, digital, retail, sales, logistics, finance and export. The company designs approximately 1,100 product styles per year manufactured in various countries, including Turkey, India, China and Vietnam.

For nearly 90 years, until 2012, 100% of sales was managed from the Head Quarters in Denmark within a business-to-business (B2B) marketing strategy in collaboration with retail stores, distributors, agents and licensed partners. These included large sports retail chains, department stores and boutiques in over 40 countries. Hummel's largest markets, Denmark and Germany, were considered to be the 'home' markets, followed by the markets in France and Turkey, and licensed markets in Holland, Japan and Korea.

4.2 The Challenges for Hummel

However, in 2009, Hummel's top management team began to recognize that the Internet was changing the structure of its market. Global competitors, including Nike, Adidas, Puma and Reebok, were increasingly controlling their distribution and customer contact by selling directly to consumers via their own branded retail stores and ecommerce platforms. They had also begun to communicate and interact directly with consumers via social media and digital marketing.

There seemed little doubt that the Internet, mobile devices and social media were revolutionizing the fashion industry. Consumers were able to research products and shop anytime, anywhere at their convenience using multiple sources of brand and product information when browsing and shopping sports fashion products. Importantly for Hummel, these consumers expected to interact with, and buy directly from, their favorite brands. Hence, Hummel had to change its business strategy. Specifically, it had to change its marketing and sales strategies to satisfy the new consumers (B2C) demands. To do this, the company had to reconfigure its existing B2B resources to meet requirements in the new B2C business channel, develop new B2C resources and dispose of redundant B2B resources to transform their operations for the new retail reality.

The CEO explained to the researcher: *"It was for many years evident that ecommerce would become a serious part of the business. However, the question was always: when shall we focus on it? And in which direction? I don't remember a specific date or year where we first discussed ecommerce at the Board. The year you were hired [2010] was the year in which the Board of Directors decided to have a more strategic focus on the web and the possibilities it gave."* He further explained that there were no existing B2C or digital knowhow, skills or resources within the company: *"The only thing I knew was that this thing [digital] was something we needed to do something about. Internally in the company, including myself, we had no knowledge at all as to what the world or market would bring in the next three or four years [in terms of digital]. So we needed something; we needed capacity and brain power within this area. That was actually the only knowledge I really had."*

The CMO similarly explained the reason for changing the business strategy as a sense of a new dynamic in the market: *“The reason was first and foremost, that we in general wanted to strengthen our digital capability and competence. We knew that it was an area where Hummel did not possess any significant skills internally [...] we saw the possibility to strengthen our profile. Another reason was that I thought we might achieve some competitive advantage at some point. I didn’t understand to what extent, where and when, to be quite honest. Not a lot had it [digital capabilities] at that point.”*

The CSO also recognized that the market was changing because of the Internet, and saw the chaos it could create for Hummel, and hence, the need for consistency: *“We knew that we were facing some challenges at the time. For me it was especially that we were not talking with one voice as a brand. It was a case of every man is his own fortune – uncontrolled expressions across countries and product categories. Different platforms. Different positions. So the consumer perception was totally different, dependent on where in the world you sat. The reason why we had to use digital for cleaning up and aligning was that we realized that consumers gather brand information on the Internet to a larger extend than in the stores.”*

The CEO, CMO and CSO sensed a new strategic direction emerging even though they were not able to articulate its scope. Never-the-less, they all realized that the company lacked alignment between its current resources and the new business strategy going forward. New business resources and new IT resources would need to be developed for a B2C strategy.

In 2012, after much careful deliberation, Hummel took its first steps into the B2C domain by piloting ecommerce on its new global website in a small and careful manner in the home markets of Denmark and Germany. In 2013, after 90 years of operating an exclusive B2B business, the company rolled out full B2C ecommerce in Germany with a plan for rolling it out in other countries, until Hummel could offer global ecommerce in 2016. Hummel also opened its own stores and “shop in shops”, and in 2014 it introduced the first integrations between stores and ecommerce. Hummel changed its organizational structure and focus to be more consumer centric with a controlled and holistic brand presence across online and offline

channels as well as across the B2B and B2C business areas; thereby, its omnichannel transformation began.

The longitudinal research describes first how Hummel transformed from being a singlechannel retailer since its inception in 1923 into a multichannel retailer in 2012 and then how it began to strive for becoming an omnichannel retailer in 2014. It has a special focus on how Hummel managed to build B2C ecommerce via its dynamic capabilities; how it developed its IT and business resources to align with the new digital business strategy; and how social media, data and technology were shaping the marketing and sales channel operations and infrastructure for omnichannel.

In summary, Hummel responded to the pressure from consumers, competitors and market trends, in general, in order to develop multichannel and omnichannel initiatives when the emergence of the Internet changed the dynamics of the market within which it was competing. These initiatives are explored in this thesis through action research over the course of four years and four months. The results of the research are explored in Paper 2, Paper 3 and Paper 4.

5. METHODOLOGY

In this chapter the research approach for studying the transformation at Hummel is presented. Engaged scholarship is initially introduced as the foundation for the approach, which is followed by the chosen research method: action research. Following this, the detailed research design is presented, including presentations of the data gathering techniques applied during the study. The section concludes with a narrative of the action research cycles and a reflection on these.

5.1 Engaged Scholarship

Engaged scholarship represents an approach for studying and understanding a complex real-world problem by conducting research in collaboration with practitioners and other stakeholders who are affected by, or interested in, the problem. Instead of merely viewing organizations as data collection sites and funding sources, an engaged scholar views them as a learning laboratory where practitioners and scholars can co-produce knowledge on an important question or issue. Engaged scholarship implies a fundamental shift in how researchers define their relationships with the communities in which they are located. Engagement is a relationship that involves negotiation, mutual respect and collaboration to produce a learning community; hence, it calls for a more engaged relationship between the researcher and her client. This is needed if research findings are to have an impact in advancing science and practice (Van de Ven 2007).

Andrew Pettigrew (2001) formulates the gap between research and practice as a knowledge production problem. He states that the action steps to resolve the old dichotomy of theory and practice were often portrayed with a minimalist request for researchers to engage with practitioners through more accessible dissemination. Instead, he encourages a wider and deeper form of engagement between management researchers and practitioners that entails experimentation with the co-funding, co-production and co-dissemination of knowledge.

Engaged scholarship addresses the relationship between research and practice with emphasis on the gap between research and practice, which is represented as a knowledge transfer problem. Van de Ven and Johnson (2006) argue that engaged scholarship enhances not only the relevance of research for practice but also contributes significantly to advancing research knowledge in a given domain. It does so by being a participative form of research for obtaining the advice and perspectives of key stakeholders (researchers, users, clients, sponsors and practitioners) to understand a complex social problem. It represents a strategy for surpassing the dual hurdles of relevance and rigor in the conduct of fundamental research on complex problems in the world.

By exploiting differences in the kinds of knowledge that scholars and practitioners from diverse backgrounds can contribute from their individual perspectives, engaged scholarship produces knowledge that is more penetrating and insightful than when scholars or practitioners work on the problem alone. The impact of the research can improve significantly when researchers do four things: (1) confront questions and anomalies arising in practice; (2) organize the research project as a collaborative learning community of scholars and practitioners with diverse perspectives; (3) conduct research that systematically examines alternative models pertaining to the question of interest and (4) frame the research and its findings to contribute knowledge to academic disciplines, as well as one or more domains of practice (Van de Ven 2007, p.34)

In the field of Information Systems, researchers argue that *“engaged scholarship offers a grand opportunity to address key challenges within the IS discipline in a novel and constructive way”* (Mathiassen and Nielsen 2008, p.3). The engaged scholarship framework has a wide application to the challenges faced in the IS discipline at large. It is therefore encouraged that future IS research should emphasize the involvement of stakeholders, whether it be research within IT-adopting organizations or software firms. On manager, software developer or user level, it will help move the IS discipline forward and improve the position of academic research within the IS discipline at large (Mathiassen and Nielsen 2008).

Engaged scholarship can be practiced in many different forms and for many different purposes. However, according to Van de Ven (2007), there are four major forms of engaged scholarship

(see also Figure 2):

1. Basic science with stakeholder advice: undertakes to describe, explain or predict a social phenomenon.
2. Co-produce knowledge: is similar to informed basic research, but it entails a greater sharing of power and participation between researchers and stakeholders.
3. Policy/design science evaluation research for professional practice: focuses on normative knowledge related to design and evaluation of policies, programs and models for solving practical problems within a profession.
4. Action/ intervention research for a client: applies intervention to address a problem of a specific client while at the same time contributing to academic knowledge.

The choice of the different form depends on: 1. whether the purpose of the study is to examine basic questions of description, explanation and prediction or whether it is on applied questions of design, evaluation or action intervention, and 2. the degree to which a researcher examines the problem domain as an external observer or an internal participant.

		Research Question/Purpose	
		To Describe/Explain	To Design/Control
Research Perspective	Extension Detached Outside	Basic Science with Stakeholder Advice 1 3	Policy/Design Science Evaluation Research for Professional Practice
	Intension Attached Inside	Co-Produce Knowledge with Collaborators 2 4	Action/ Intervention Research for a Client

Figure 2 Alternative Forms of Engaged Scholarship
Source: Van de Ven (2007, p.27)

Within IS research a similar, but simpler, alternative to Van de Ven's (2007) classification of engaged scholarship forms is based on underlying knowledge interests (Mathiassen 2002).

1. Practice research: focuses on *understanding* IS practices with the purpose of informing or advising relevant stakeholders.
2. Design research: focuses on *designing* various forms of artifacts with the purpose of supporting stakeholders engaged in IS practices.
3. Action research: focuses on *changing* IS practices through problem solving in response to specific client needs.

In this thesis, I occupy two roles. In one, as a manager at Hummel, I am an internal participant, addressing a specific problem at Hummel. In the other role, as an academic researcher, I am contributing to academic knowledge. Hence, the method for this thesis can be classified by using the two taxonomies by Van de Ven (2007) and Mathiassen (2002). I am an internal participant who applies intervention to address a specific problem at Hummel, while at the same time contributing to academic knowledge – as defined by Van de Ven's (2007) engaged scholarship form, action research. By positioning the research within the IS domain, I focus on *changing* IS practices through problem solving in response to Hummel's specific needs – as defined by Mathiassen's (2002) third engaged scholarship form, action research. Hence, according to both classifications, this research belongs to the most attached and intervening form of engaged scholarship: action research.

As the Hummel case is described in depth in Paper 2, Paper 3, and Paper 4, this chapter will focus on describing the action research method and its challenges. In accordance with action research norms, I will account for the research in personal form (Coghian 2001). Specifically, I will describe how the research affected and influenced my role as an action researcher. As such, I am a research instrument in my own research, which is undoubtedly affecting the research as a whole. Another individual would probably not have obtained exactly the same results as I have. The research – my interactions with the organization's members and the intervention and implementation solutions - is therefore highly personal. I will attempt to

account for this personal research journey through structured action research criteria followed by a narrative of the three action research cycles and evaluation period conducted over four years and four months at Hummel.

5.2 Action Research

Action research was appropriate for studying how technology enabled Hummel to transform from a traditional B2B company to a multichannel company, as the dual-purpose research combines the practical problem with academic knowledge and it brings practitioners and researchers together in a cross-boundary relationship (Iversen et al. 2004; Mathiassen and Nielsen 2008; McKay and Marshall 2001; Rapoport 1970; Van de Ven 2007). It is a particularly appropriate form of research for obtaining the advice and perspectives of key stakeholders to understand the complex organizational challenge of transforming a traditional fashion company into a multichannel company.

Action research aims at solving current practical problems, while at the same time, contributing to scientific knowledge. However, unlike other research methods, where the researcher seeks to study organizational phenomena but not to change them, the action researcher both manages organizational change and simultaneously studies the process (Babüroglu and Ravn 1992). It is strongly oriented toward collaboration and change involving both researchers and subjects. Typically, it is an iterative research process that capitalizes on learning by both researchers and subjects within the context of the subjects' social system. It is a clinical method that puts Information Systems researchers in a helping role with practitioners (Baskerville and Myers 2004). The distinguishing feature of action research is a commitment to improve practice (Baskerville and Wood-Harper 1996).

Consistent with this, Rapoport (1970) states: *“Action research aims to contribute to both the practical concerns of people in an immediate problematic situation and to the goals of social science by joint collaboration within a mutually acceptable framework.”*

According to Baskerville and Wood-Harper (1998), action research is, in all its various forms, characterized by: 1. its multivariate social setting, 2. its highly interpretive assumptions about observation, 3. intervention by the researcher, 4. participatory observation and 5. the study of change in the social setting.

This is consonant with the notion of recent Information Systems studies, where action research is defined as an applied research discipline in which an important goal is to contribute to organizational practices related to development and use of information technology (Mathiassen 2002). Within IS, action research is therefore a powerful tool for researchers who are interested in analyzing the interplay between humans, technology, information and socio-cultural contexts (McKay and Marshall 2001).

However, being an action researcher can also be a challenging role because of its duality. On the one hand, the action researcher is an academic researcher who is not fully understood and integrated in the organization where she is engaging with practitioners, intervening and changing practice to solve a problem. On the other hand, the action researcher is a practitioner who is not fully understood and integrated in the academic environment because she is only partly engaged in the academic environment, research society and even in the language norms, as she is spending a great deal of her time in the field. This position can lead not only to a duality in role, but also to a dual personality that is never quite embraced in either of the two research settings. At times, the action researcher plays a lonely role - torn between two domains during the research process (Coghian 2001).

Furthermore, action research can also be an emotional role, as the action researcher is using herself and her actions as a research instrument. It can be a challenge to be partly objective towards the research process while being subjective towards the personal experiences as a research instrument. The write up of the research is especially cumbersome, with the researcher assessing herself, her work and the outcomes (unsuccessful or successful) for the organization, as well as unveiling personal diaries and reflections that have not seen the day of light previously. These challenges have not been extensively highlighted in the existing literature.

One way to overcome the challenges was first and foremost to stick closely to the data. I always went back to the wealth of data whenever I was in doubt about the direction of the research. This kept me to the ‘truth’ and grounded me with a confidence about my actions when following my stakeholders’ wishes very closely. Second, it was important for me to work closely with experts in the relevant fields. This resonates with engaged scholarship, suggesting that developing theory and its plausible alternatives requires conversations with knowledge experts from the relevant disciplines and functions that have previously addressed similar problems (Van de Ven 2007, p.11). In my case, my co-authors were a great help in achieving an understanding of the two domains and finding a way in which to balance them. They aided in assessing my role by their non-attached IS expert perspective. This helped clarify my research and the transformation process of Hummel. I would, as an example, not have been able to, nor feel comfortable with, clarifying that my role as Head of Digital was strategic hiring, which provided the necessary focus in driving the digital agenda toward omnichannel at Hummel. Additionally, the creation of the strategic role of the Head of Digital and the Digital Department was a way toward achieving a real fusion between IT strategy and business strategy – as pointed out in Paper 4’s lessons learned.

Similarly, in practice, I engaged extensively with knowledge experts in the field of B2C ecommerce and multichannel to understand the domain within which I was working. As it is an emerging field and omnichannel is individual to each company, I did not encounter anyone who had addressed problems similar to Hummel’s before, but the collective intelligence I gathered through the 30 interviews with external knowledge experts (explained in section 5.3.2.1) helped me understand the multichannel phenomena and gave me confidence in my recommendations and problem solving actions for Hummel.

Hence, I will argue that the interaction with my co-authors and industry contacts has made my action research stronger, more insightful, and provided me with important learnings that I would not have achieved alone. However, I am aware that some action researchers in the IS field might argue differently or take a stand against outside interference, e.g., by saying that there is a considerable risk: the more action researchers adopt publication practices from

international journals, the more the journal reviewers will shape the work – which might lead astray from a strong emphasis on engaged scholarship and action research (Mathiassen 2002). I appreciate this argument, as the publication practices indeed did influence the method section in my papers. Paper 2, 3 and 4 are presented as case studies and not as action research, due to the journal norms and space constraints, but also due to my wish of focusing on the case and not on the method in the papers. However, I made this choice knowing that I would have the opportunity to write up a full account of the action research, including my evaluation, in this cover paper for the thesis.

5.3 Criteria for Action Research at Hummel

By applying Iversen et al.'s (2004) six criteria for designing action research, both rigor and relevance are ensured in the research. The six criteria are: roles, documentation, control, usefulness, theory/framework and transferability. These are each systematically described and applied to the action research at Hummel in the following section.

5.3.1 Roles

Clarifying roles helps to establish impartiality as researchers, and explicate the discipline in collaborating with practitioners (Baskerville and Wood-Harper 1996) Action researchers are not disinterested observers (Checkland 1999; Susman and Evered 1978) Instead, action research requires a “partnership of practitioner-researchers and researcher-practitioners” (Schön 1983, p.323).

When I commenced as an Industrial PhD on 15th of August 2010, the CEO made clear that I was going to work closely with him, with the CMO (Chief Marketing Officer) and the CSO (Chief Sales Officer). These three executives, along with the CFO (Chief Financial Officer), constituted the top management team at Hummel. During the project, the CFO was replaced twice and did not become a key informant until towards the end when the CFO became a member of the ecommerce steering committee.

When the project was initiated, the CEO explained that he wanted me to help launch ecommerce to improve their social media presence. The CMO expressed a need for an overall

online strategy, procedures and routines for branding, ecommerce and social media. The CSO expressed a strong concern about cannibalization and channel conflict if we were to launch B2C ecommerce. To spearhead the transition in Hummel, I was given the title of Multichannel Manager for Hummel.

Hence, my initial role was to collaborate with the CEO, CMO and CSO on ecommerce, social media and strategy. However my initial action researcher role changed a year later, when, in July 2011, I was employed as a manager and became a member of the international management team. I was now given the role of Head of Digital. This included the responsibility for the digital organization and department – for building, hiring and managing the team needed for developing and operating the digital projects. This meant that my role as an action researcher changed to become an insider action researcher, i.e. a manager who undertakes action research projects in her own organization. The inside action researcher is thus immersed in the organization and builds up knowledge about the organization from being an actor in the process being studied (Coghian 2001).

The CEO and CMO's attitude towards me as a researcher and towards the project was initially (both in words and through action) with open interest. They both recognized that they lacked expertise in the field of ecommerce and multichannel. The CEO commented numerous times that he did not know much about ecommerce and that his main task therefore was to pave the way for my work to be done. In contrast, the CSO was intimidated by ecommerce (and hence by me), as he had invested a lot in his relationships and sales setup with the largest sports retail chains in Denmark (which accounted for 80% of the turnover). Numerous times, he expressed openly that if Hummel would launch ecommerce in Denmark, it would be without him. There was thus open conflict within the organization already from the beginning.

Insider action researchers before me have commented on the role duality of being a manager while researching. For example, Nuttall (1998), who was a Head of Site while doing his PhD, noted complexity in requesting subordinates to answer questionnaires that had been distributed by their boss, but overcame this by his participative management style built up over six years. Similarly, I was interviewing both subordinates and my own bosses. However, as

I entered Hummel as a PhD student, I was not intertwined in the hierarchy beforehand and nor did I have a pre-understanding of the company and its organizational politics. Instead, I was introduced as a researcher and only later became an insider manager-researcher who stayed in the company as a manager. Because of this, I found that I could put on my researcher “hat” when I needed and get honest answers. Nevertheless, no one saw me solely as a researcher. It is clear from the interviews that everyone addressed my work as a manager, and they assessed my results as a manager, not as a researcher. Even though I did not find any difficulties in interviewing my colleagues and I felt that I received honest and open answers, I got answers based on my role and work, which probably could have been very different without my role as an insider action manager-researcher.

Additionally, there might have been some bias in the top management interviews, as they saw me as a “member of the family” and therefore wanted to help me with the research. Perhaps some answers were slightly more positive because of this and it is conceivable that they expressed more willingness towards the new project, as they did not wish to be classified as “old-fashioned” or unwilling to change in the publications and in the thesis. However, the top managements’ attitudes did not show any dramatic changes in opinions throughout the interviews in 2010, 2011, 2012, 2013 and 2014. There were surprisingly coherent statements and attitudes that only naturally developed with the roll out of ecommerce and the omnichannel transformation. The only major change was the CSO’s attitude towards introducing B2C in Denmark – while, at the same time, his interviews were far more positive towards change compared to what his actions revealed.

5.3.2 Documentation

Explaining the data collection approach in detail is a key discipline that distinguishes research from consulting (Baskerville and Wood-Harper 1996). Particularly, longitudinal research on organizational change offers a useful approach to document action research (Pettigrew 1990). Pettigrew’s approach is based on the assumptions that: 1. Change processes should be studied in the context of change at another level of analysis, 2. Revealing temporal interconnectedness

is important, and 3. There is a need to explore context and action where context is a product of action and action is a product of context (Pettigrew 1990, p.269-270).

The data collection in the current study included interviews, group interventions, archives, company documents and emails, diary and note keeping (see Table 5). The data collection methods were similar for each of the three research cycles (explained in depth in section 5.5). The only difference was that the third party IT vendor collaboration started in phase two, and is therefore not included in phase one. Each method is described in detail in the following sections.

Table 5 Data Collection in Hummel

Cycle 1 Digitalization Aug 2010 – Dec 2010		Cycle 2 Multichannel Jan 2010 - Mar 2012		Cycle 3 Omnichannel Apr 2012 - Dec 2013		Evaluation Jan 2014 – Dec 2014	
- Semi structured Interviews - Meeting recordings - Meeting minutes - Emails - Reflections	CEO	- Semi structured Interviews - Meeting recordings - Meeting minutes - Emails - Reflections	CEO	- Semi structured Interviews - Meeting recordings - Meeting minutes - Emails - Reflections	CEO	- Semi structured Interviews	CEO
	CSO		CSO		CSO		CSO
	CMO		CMO		CMO		CMO
- Unstructured Interviews - Group interventions - Meeting recordings - Meeting minutes - Emails - Reflections	Internal departments	- Unstructured Interviews - Group interventions - Meeting recordings - Meeting minutes - Emails - Reflections	Internal departments	- Unstructured Interviews - Group interventions - Meeting recordings - Meeting minutes - Emails - Reflections	Internal departments	- Semi structured Interviews - Group interventions	Internal departments
	Countries		Countries		Countries		Countries
	External contacts		External contacts		External contacts		
			Third party IT vendor		Third party IT vendor		

5.3.2.1 Interviews

There were 157 interviews with Hummel internal employees and external partners. The interviews were conducted over four years and four months, from August 2010 to December 2014.

Who

At the strategic level, 41 interviews were conducted with top management (CEO, CMO, CSO,

company owner and board) beginning in August of 2010 until the end of 2014. Of the 41 interviews, 15 were systematized individual interviews with the key informants of the research, the CEO, CMO and CSO, which took place at the end of each year in 2010, 2011, 2012, 2013 and 2014. As this thesis is focused on the top management's view of the transformation, these interviews are the most cited.

Further, another 86 unstructured interviews with Hummel internal employees were conducted over the four-year period. The interviewees, while predominantly with departmental managers, also included a cross section of all levels of the company. The interviews focused on how the individuals or departments were involved in developing the digital initiatives. There were also cross-departmental group interviews (e.g., steering and project groups) that focused on how the company as a whole could build digital initiatives. Once again, as my papers are focused on the top management's view of the transformation, these interviews are rarely cited, but rather function as a base of insights for my understanding of the organization and its capabilities, hence shaping my recommendations, intervention and implementation of systems and solutions.

Finally, there were 30 interviews with executives outside Hummel. These included executives in other fashion multichannel companies and pureplay companies such as Bestseller and ECCO in Denmark, Chanel in UK, Naturum in Japan and Lotte in Korea, and with technology companies and ecommerce outsource companies, including, for example, GSI in UK and Boozt in Sweden, and Netimage and Creuna in Denmark.

The purpose was to collect attitudes and opinions of fashion brand or ecommerce professionals and obtain information based on insider experience and privileged insights. This increased the understanding of the why, how and what of fashion brands launching ecommerce and multichannel (Kvale and Brinkmann 2008), hence also shaping my recommendations, intervention and implementation of systems and solutions. The external interviews were furthermore an important part of the action research in developing practice and theory and its plausible alternatives, as this requires conversations with knowledge

experts from the relevant disciplines and functions that have addressed similar problems before (Van de Ven 2007).

A record was kept of the 157 interviews in an excel sheet categorized chronologically. Each interview included indexed information such as interview number, date, duration, company, interviewee(s), form of interview (e.g., face to face, telephone, Skype), location, recording, filename and place of storage, notes. The interviews that were transcribed and the interviews that were used for quotes were further marked (see Figure 3 below).

No	Date	Duration	Company	Involved	Subject	Form of Interview	Location	Recorded/ Filename	Transcribed/stored	Quotes/notes
113	96	16/11/11	1h	hummel	Chr Stadl, Rina, Mette	presentation to the owner of hummel online activities according to multichannel model including SM	meeting: face to face	HNI office, Baltica gate	not recorded	Chr Stadl: the world is getting smaller and more interconnected due to online. hummel is a global brand, and need to act like this. All hummel online activities should be "one brand one voice", follow the same template, the same design and the same tone of voice. We should not accept hummel partners saying that they want follow these guidelines and templates. ie Holland is just around the corner from DK, so they need to give the visitors the same experience-visual and brandin wise- as the headquarter, even though they dont have the same styles. Japan and Korea is also just around the corner online, they also need to have the same look online, maybe though with their crazy colours in the content, but the frame/template should be the same
114	97	21/11/11	1.04 h	hummel & konkurrencestyrelsen	Camilla Hesselby, Kajja Overgaard-Rejnholdt, Sarah Ann Mønsted, SSC, RH	guidelines for e-customers /ecommerce	meeting: face to face	konkurrencestyrelsen, GPH	extensive notes	
115	98	22/11/11	10m	hummel	Slovenia, Rina	hummel.net global website	meeting: face to face	AW Sales Conference, Frud	extensive notes	"I would not mind that hummel international is responsible for our ecommerce. It would mean that we can sell more, because you will offer a larger assortment"
116	99	23/11/11	1h	hummel	Ebru/Turkey, Rina	hummel.net global website	meeting: face to face	AW Sales Conference, Frud	extensive notes	
117	100	23/11/11	5 m	hummel	SSC	pep talk from SSC about online	talk	AW Sales Conference, Frud	video	
118	101	23/11/11		hummel	Country partners	Workshop & presentation of 1. facebook alignment 2. global website 3. ecommerce	Group intervention/ Workshop: face to face	International sales conference	PP presentation & few notes	
119	102	24/11/11	43 m	hummel	Manuel/Spain, Rina, Anders	hummel.net global website /ecommerce	meeting: face to face	AW Sales Conference, Frud	extensive notes	Would not mind that hummel international is responsible for ecommerce in Spain. "The hard work will be done by hummel international and we will benefit".
120	103	06/12/11	1.40 h	hummel	JNM, Cornator: Henrik og Peter, Mette, Rina	Net Image & Cornator meeting	meeting: face to face	hummel conference room	extensive notes	
121	104	12/12/11	3 h	hummel	HNI, Lena, Rina	LT meeting	meeting: face to face	Hotel Marselis	extensive notes	
122	105	13/12/11	53m	hummel	HNI, Rina	Interview af CMO om standardisation projects	meeting: face to face	HNI office	Transcribed. Store in hummel case/final interviews	standardisation projekterne har givet os en erkendelse af at vi er way behind. Jeg har svært ved at se ulemper i nogle af projekterne. Den anbefalede plan og struktur er lige så værdifuld som erkendelsen..
123	106	13/12/11	1.21 h	hummel	HNI, Rina	online meeting: ownership of shop and ecommerce solution	meeting: face to face	HNI office	extensive notes	
124	107	13/12/11	1.5 h	hummel	Lars W, ALL, TBK, Dan, Lena, Rina	EC Serbian app	meeting: face to face	hummel conference room	extensive notes	
125	108	14/12/11	25m	hummel	managers	Managers meeting	meeting: face to face	hummel conference room	few notes	
126	109	15/12/11	17 m	hummel	SSC, Rina	Interview af CEO om standardisation projects	meeting: face to face	SSC office	Transcribed. Store in hummel case/final interviews	det har været en eyeopener og en markant ændring. Multichannel modellen var den største eyeopener
127	110	15/12/11	1.14	hummel	Jens Brink, Marc, Mette, Rina, HNI	German online meeting	meeting: face to face	HNI office	extensive notes	
128	111	20/12/11	43m	hummel	Simon, Rina	Interview af CSO om standardisation projects	meeting: face to face	SIS office	Transcribed. Store in hummel case/final interviews	Jeg er gået fra at være ubhth til at være en ambassader for online. Det er en erkendelse jeg langsomt har fået
129	112	21/12/11		hummel	HNI, Lena, Rina	LT møde	meeting: face to face	HNI office	notes	
130	113	22/12/11	44m	hummel	Henrik Svernhing, Rina	Interview af export manager om standardisation projects	meeting: face to face	hummel showroom	Transcribed. Store in hummel case/final interviews	Der er sket en bevægelse. Det kan blive endnu strammere. Jeg er tilhænger af standardisering med lokal markedsstilpasning
131	114	06/01/12	2 h	Lazy/Lazy	Søren Filbert, RH	White label software vs retailer online	meeting: face to face	Lazy office, vejle	few notes	tilbad 25 bloggere et gavekort på 750kr før jul, hvis de ville skrive om Lazy, ingen responderede!!

Figure 3 Excerpt from the Interview Record

Table 6 below summarizes the interviews, categorized chronologically in the table - horizontally by the action research cycles and vertically by internal department or external partner with the number of interviews indicated accordingly.

Table 6 Interviews Conducted

	Digitalization Aug2010-Dec2010	Multichannel Jan2011-Mar2012	Omnichannel Apr2012-Dec2013	Evaluation Jan2014-Dec2014
Strategic Management				
CEO	1	6	4	2
CMO	1	7	3	1
CSO	2	3	2	1
Owner	1	1		
Board	1	1		
Senior Management Group		4		
<i>Subtotal = 41</i>	<i>6</i>	<i>22</i>	<i>9</i>	<i>4</i>
Functional Departments				
IT	1	3		1
Marketing	2	6		1
Sales		2		
Finance	1			
Logistics	1	3		
Export	1	7		
Design	2			
Digital		14		
<i>Subtotal = 45</i>	<i>8</i>	<i>35</i>	<i>0</i>	<i>2</i>
Cross Functional				
Project groups incl. vendor		14		
Steering Group		3		
Hummel country partners	1	19	4	
<i>Subtotal = 41</i>	<i>1</i>	<i>36</i>	<i>4</i>	
External				
Technology partners	1	3		
Industry contacts	1	22	2	1
<i>Subtotal = 30</i>	<i>2</i>	<i>25</i>	<i>2</i>	<i>1</i>
Total = 157	17	118	15	7

How

The 157 interviews were between 30 minutes and two hours in length, and were all, whenever possible, tape-recorded with an iPhone or iPad and stored in purpose made programs Auditorium and Evernote in order for the interviews to be indexed, categorized and searchable. Extensive notes were made during all interviews and stored in the program together with the respective interview recording when available.

The 15 systematized interviews with the top management (i.e., key informants) of the research at the end of the year in 2010, 2011, 2012 and 2013 were in-depth, semi-structured and open-ended interviews regarding five consistent key topics. These were selected for recording, transcription, translation and analysis according to topic (see Table 7). This gave a longitudinal perspective of the development in their attitude towards the omnichannel project and transformation from 2010 to 2014 from their individual position. It helped understand the why, how and what of the development of the top managements' attitude towards the five key areas of omnichannel (Kvale and Brinkmann 2008). In addition, two interviews with the Export Manager in 2011 and the IT Manager in 2014, were recorded, transcribed, translated and analyzed (see Table 7). These two interviews corroborated the understanding of the top management's views and the transformation process from a functional level perspective.

Table 7 Transcribed Interviews

		CEO	CMO	CSO	IT	Export
Semi-structured interviews	2010	1	1	1		
	2011	1	1	1		1
	2012	1	1	1		
	2013	1	1	1		
Validation	2014	1	1	1	1	
Total = 17		5	5	5	1	1

What - Interview questions

The five topics of the interviews are described below. They soon became more structured during the interview program:

1. One Brand One Voice (OBOV)

This topic involves aligning the brand through digital initiatives, for example, integrating 25 local Facebook pages in one global page and aligning 22 different local websites onto one global platform. The challenge was to move from a local scattered and uncontrolled brand to an aligned brand across markets and channels.

The interview question was, “What does our work regarding OBOV and aligning the brand through digital channels mean to you as CEO/CMO/CSO?”

This topic is discussed in depth in Paper 3 and Paper 4.

2. Social media

This topic relates to Hummel’s first digital initiative, the use of social media, which also enabled the initial direct contact and interaction with end-consumers. Hummel launched a Facebook page on 28 December 2007 as its first social media presence. Following that, YouTube and Flickr were launched. Later Twitter, Instagram and Google+ and Pinterest were launched in the beginning of 2012 and Tumblr in the middle of 2012. However, the main vehicle was Facebook, which grew from 13,000 Likers in 2010 to 1.3 million Likers in 2014.

The interview question was, “What does our social media community, strategy and guidelines mean to you as CEO/CMO/CSO?”

This topic is discussed in depth in Paper 3 and Paper 4.

3. Online retailers:

This topic relates to Hummel’s B2B customers who are online pureplayers, such as Amazon, Zalando and Rakuten. Hummel first began to sell to online retailers in 2005. Sales through this channel grew from 5% of total sales in 2010 to 11% in 2014, and was hence of growing importance for both sales volumes and strategic brand purposes.

The interview question was, “Why is it important for you as CEO/CMO/CSO to focus on selling to and supporting online retailers?”

This topic is discussed in depth in Paper 2, Paper 3 and Paper 4.

4. Ecommerce

This topic relates to Hummel’s own B2C ecommerce, which was one of the main reasons for the PhD project initiation in 2010 and has continued to be a controversial topic. Hummel launched pilot ecommerce in the beginning of 2012 and rolled out full ecommerce of all products in Germany in 2013, with plans of rolling out other countries successively until global

ecommerce is offered in 2016.

The interview question was, “What does it mean to you as CEO/CMO/CSO to launch ecommerce direct to end-consumers?”

This topic is discussed in depth in Paper 2, Paper 3 and Paper 4.

5. Multi and omnichannel

This topic relates to Hummel’s entire digital universe (including digital in-store) and specifically to how all the digital B2C sales and marketing channels are connected to offer the consumer an aligned experience of Hummel. The interconnectivity of all the channels was drawn as a map, which developed each year as the channel portfolio evolved. This updated map was always shown to the interviewees in the interview.

The interview question was, “What does our omnichannel model and strategy mean to you as CEO/CMO/CSO?”

This topic is discussed in depth in Paper 3 and Paper 4.

The interview quotes from the 15 interviews with the CEO, CMO and CSO are categorized according to the five topics and systematically listed in Table 18 in Appendix C according to interviewee, topic and year.

For the 86 internal interviews, the key questions and topics explored were all related to building B2C ecommerce and digital initiatives. Each individual interview was focused on how to build ecommerce and digital initiatives together with the individual or department who was interviewed. Each cross-departmental interview (e.g., steering group, manager group or global group) was focused on how the company as a whole could build B2C ecommerce and digital initiatives.

The 30 interviews with industry contacts and technology partners explored key questions and topics such as their specific digital journeys, success parameters for ecommerce, omnichannel and IT systems, trends and future development in the omnichannel field.

Finally, the CEO, CMO, CSO and the IT Manager were interviewed at the end of 2014 to validate the results of the research and to obtain their view on the reason for initiating and sponsoring the PhD project and the contributions they received from the PhD project. The interview included three semi-structured questions:

1. What were the reasons for Hummel initiating this PhD project?
2. What were the contributions of the project from your point of view?
3. Can you validate the action research phases and the fact that Hummel transformed from singlechannel to omnichannel in this period?

These interviews were transcribed, translated, analyzed and categorized. The selected quotes are included in Table 18 in Appendix C according to interviewee, topic and year.

5.3.2.2 Meetings including Board Meetings

As with the interviews, I recorded and kept notes of meetings within the company, including Board meetings where I presented the online strategy and its development, budget and turnover. In the beginning, I was treated as an external expert with experience and skills in a field where Hummel as an organization required help. This was very typical for the organization, as Hummel is known to be very open, engaged and including. Hence, I was quickly perceived to be “one of them” and treated with respect, trust and openness by the management, which then trickled down to their teams. This also meant that people in functional roles openly expressed their frustrations with the project and with the extra workload that I presented to them. The top management would likewise share their concerns, worries and even fears with me. I felt at no time, that information, attitude or emotions were masked or withheld from me; rather, the communication was open.

5.3.2.3 Group interventions including workshops

The role of large group interventions in which all the participants meet together to explore their collective identity and future direction of the project is a critical action research mechanism (Coghian 2001). At Hummel, a large group intervention was mounted twice a year, in November and May. This was combined with the International Sales Conference, where all

30 Hummel distributors and country partners were gathered to discuss the brand development, future campaigns and strategies.

I was responsible for presenting the online strategy for all attendees (from country CEOs to marketing and sales people). I also conducted workshops for managers responsible for the digital roll out in each country. For this group, I briefed them on specific digital issues, including the digital guidelines and how to implement these.

The CEO always introduced me as a knowledge expert, as one of the best in the field, whom Hummel now had as a manager. This way he urged people to listen to me. He would even either introduce or conclude my first presentations in 2010 and 2011 with the words: *“... and if you have any problems with what Rina tells you to do, you come to me. Your problem is with me.”* This naturally paved the way for my work and for the change to come. Later, when the country partners were used to me and my team and what we represented, the CEO would still urge the country partners to join the workshop, as they really needed to understand the digital world and how they could implement the initiatives in their local areas.

5.3.2.4 Archives and emails

Archival material was systematically collected and reviewed. This included company documents (e.g., Brand Book, country contracts, 2016 strategy and plans, yearly plans for each department, etc.); presentation slides for the B2C proposal, subsequent updates to management and archives (e.g., historical marketing campaigns, website contracts, etc.); emails (e.g., between owner and management group, between management group and the digital team, etc.) and meeting minutes (of meetings with different Hummel countries, management meetings, Go-to-Market and marketing meetings). The purpose of all of this material was to get a complete overview of the activities and to get an extra dimension in the data collection, as people often do not do what they write; they may simplify issues in writing, leaving out the personal emotions and extra layers of meaning.

5.3.2.5 Diary and note keeping

Jepsen, Mathiassen and Nielsen (1989) advocate diaries as a medium for the management of information systems development projects. *“Systems developers have to reflect continuously on previous and future situations and create and modify actively conditions and patterns of behavior”* (p.207). This acknowledges that situations are unique, complex, uncertain and even discordant in professional practice. The practitioner must therefore be aware of the uniqueness of the situation and behave accordingly. Diaries contain descriptions, evaluations and reflections on the actions contained in an IS project and are considered a useful means for professional reflection and development, as well as for encouraging the establishment of new working habits.

I wrote down my reflections at Hummel in a diary form whenever a new issue occurred or when milestones were reached. To do this, I wrote the reflections in an email, which I sent to myself, so that it was available wherever I was situated and on whichever device I had available (e.g., mobile in a taxi, iPad following straight on from a meeting, or at a computer in the evening when I had time and space for overall reflection). My inbox then had an up-to-date folder for these reflections that were always be accessible.

The notes were mainly reflections on my role in the company as an action researcher. I found it important to ask “What did I learn?” because it is easy to forget what has been learned when reflecting. I also kept asking emic questions (Myers and Avison 1997), because once we get used to a context we often stop asking questions. Hence, keeping a diary was important for the project, as we tend to understand the world retrospectively (Jepsen et al. 1989). See Figure 4 as an example of my reflection notes. I have kept the original annotations without clarifying the meaning of the abbreviations.

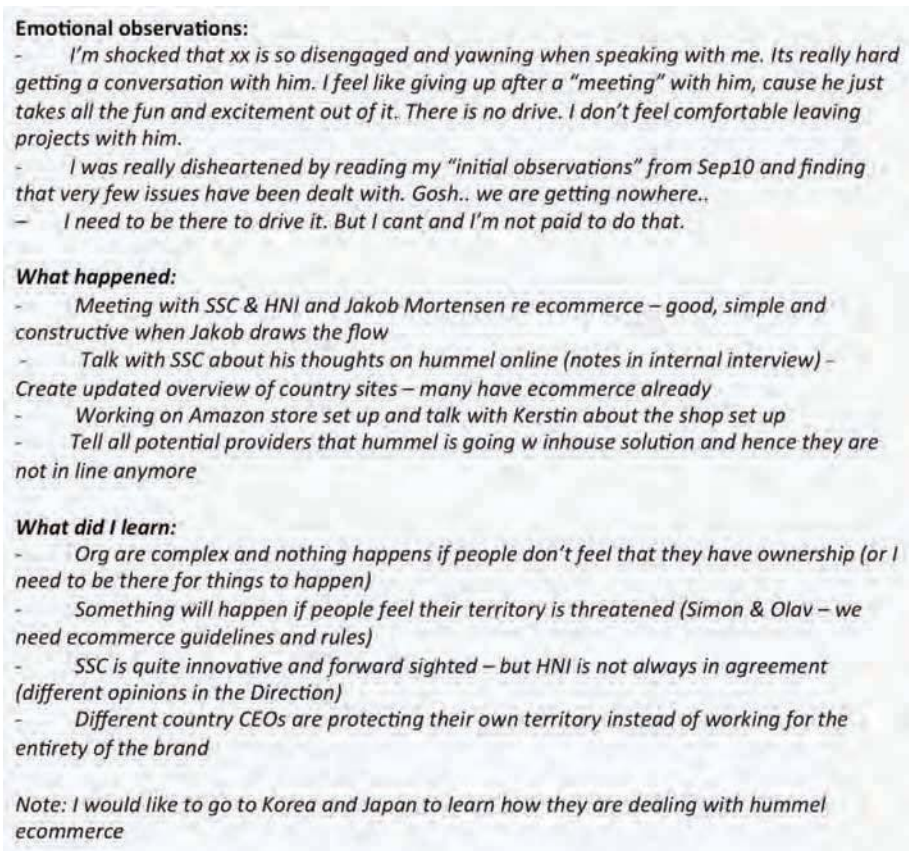


Figure 4 An Example of a Reflection Note. Excerpt from 18.04.11

5.3.3 Control in Action Research

Action research is a social activity. It is collaborative and emergent in nature. Control issues must thus be considered to make sense of the research process and its outcome. Avison et al. (1999) propose three control structures that we should be aware of and report on: control over initiation, determinations of authority and degree of formalization.

Authority at Hummel lies with the existing organizational structure: the CEO and board of Directors. To them, I am not seen as a researcher within the company (even though I initially was presented as an Industrial PhD). Instead, I am usually treated as the Head of Digital, reporting to the CMO. The degree of formalization is characterized by the Industrial PhD contract and the formal obligations it implies. However, there has not been any major conflict of interest between my role as a researcher and a manager at Hummel. To maintain this, I regularly took the opportunity to align the expectations for my work and my behavior as a researcher with the CEO.

5.3.4 Usefulness

Usefulness is the primary criterion in action research. Demonstrating the usefulness of findings in the problem situation supports the impartiality of action research and creates a baseline upon which the results might be transferred to other similar situations (Baskerville and Wood-Harper 1996).

The usefulness of the project at Hummel was very clear for the client, as they often expressed the need for, and importance of, the intervention and learning. The online and digital area became an increasingly important agenda and was presented as one of the four strategic focus points for the years ahead at the 2010 International Sales Conference.

The project contributes to the research community by extending models of description and explanation to models of design and action (Gregor 2006). This is examined below in the Discussion section.

5.3.5 Theory/Frameworks

Relating results to an existing framework or to an existing body of knowledge distinguishes research from consulting. This provides a basis for discussing transferability of results (Baskerville and Wood-Harper 1996). Furthermore, explicating the framework, its background and the researchers' backgrounds will assist interested readers in recovering the course of action more convincingly (Checkland 1999; Nielsen 2007).

For the study at Hummel, the results are related primarily to the existing body of knowledge within the field of IS and secondarily to the field of marketing and strategy. For Paper 2, the results are related to business and IT resources, alignment and dynamic capabilities theories. In Paper 3, the results are related to both a business and IT alignment framework and a multichannel framework.

5.3.6 Transferability

Examining the conditions for transferability of research findings addresses the situation-dependency of action research, which potentially limits generalization from the findings (Baskerville and Wood-Harper 1996). By relating the results to existing bodies of knowledge, we clarify and contextualize the research contribution, thereby increasing the transferability to similar situations.

Results from action research tend to be concrete and not abstract (Nielsen 2007). Questions regarding transferability include: 1. What is the area of application outside which the approach is likely not to be useful? 2. Under which conditions (e.g., time and resources) is the approach applicable? 3. Is it possible to make the approach understandable to others? 4. What are the skills and capabilities that facilitators and other actors must possess? 5. To what extent is the approach kept general to increase transferability, as opposed to being made specific to increase usefulness in practice?

The approach at Hummel is transferable to companies in similar contexts, i.e., wholesale fashion companies that are launching B2C ecommerce, multichannel sales and communication. To support this claim, workshops were conducted and presentations given to companies in similar situations. Consequently, I gained a good understanding of the barriers and drivers, while at the same time, sharing my findings. Many of the issues confronted at Hummel are general (i.e., understanding top management's support, channel conflict and cannibalization; setting up a digital department and organizing the company for digitalization; reconfiguring existing resources and creating new resources, etc.) for brand-centric fashion companies launching ecommerce and omnichannel.

5.4 Action Research Models

Baskerville and Wood-Harper (1998) argue that the essence of action research can be seen as a simple two-stage process. Stage one is the diagnosis. This involves a collaborative analysis of the social situation by the researcher and the subjects of the research. Theories are formulated concerning the nature of the research domain. The second stage, the therapeutic stage,

involves collaborative change. In this stage, changes are introduced and the effects are measured and analyzed (Blum and Blum 1955).

However, there are many different ways to organize the steps and iterations in action research (Baskerville and Wood-Harper 1998). Each specific action research project develops its own unique process (Mathiassen 2002). Susman and Evered's (1978) classic process emphasizes: diagnosing, action planning, action taking, evaluating and specifying learning.

Checkland (1991) references Susman and Evered(1978), emphasizing the role of the framework (F), methodology (M) and area of concern (A). McKay and Marshall (2001) have symbolized the dual imperative of action research by organizing action research efforts into a problem solving interest cycle and a research interest cycle. Iversen et al. (2004) propose a collaborative practice research (CPR) as another term for action research. They divide the different processes into initiating, iterating and closing phases (see Table 8).

Table 8 Action Research Models Culminating in the Hummel Model

	Susman and Evered 1978	Checkland 1991	McKay and Marshall 2001	Iversen et al. 2004	Hummel AR model
Initiating	Establish the client-system infrastructure	Enter problem situation	1. Identify: problem and research theme 2. Reconnaissance: problem context and research literature 3. Plan and design: problem solving and research questions	1. Appreciate problem situation 2. Study literature 3. Select risk approach	1. Identify problem situation 2. Study literature 3. Identify goals with key stakeholders
Iterating	1. Diagnosing 2. Action planning 3. Action taking 4. Evaluating 5. Specify learning	1. Establish roles 2. Declare framework (F) and methodology (M) 3. Take part in change process 4. Rethink 2-4	4. Action steps Implement 5. Monitor: problem solving and research 6. Evaluate in terms of problem alleviation and research questions 7. Amend plan based on	4. Develop risk framework 5. Design risk framework 6. Apply approach 7. Evaluate experiences	4. Action planning 5. Evaluate with stakeholders 6. Action taking 7. Evaluate (and Identify development goal) with stakeholders
Closing		5. Exit 6. Reflect on experience and record learning in relation to F, M, and problem situation	8. Exit, if: problems alleviated and research questions resolved	8. Exit 9. Assess usefulness 10. Elicit research results	

Source: Originally classified by Iversen et al. (2004)

To plan the action research project at Hummel, we drew on Susman and Evered's (1978) original cyclical action research model (see Figure 5). We found that the emphasis of this

model on agile processes constantly developing and improving without a pre-set close to the process were very well suited, given that we were working in the arena of information systems, specifically within the dynamic domain of social media, ecommerce and multichannel.

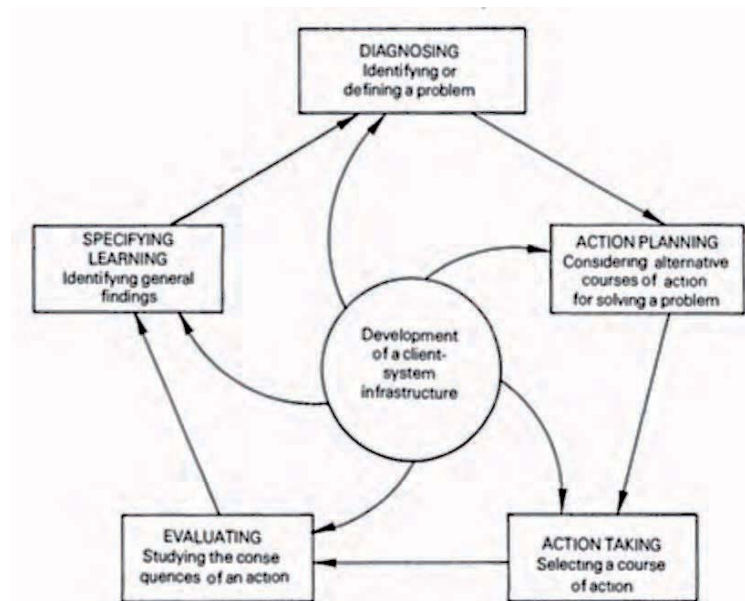


Figure 5 The Cyclical Process of Action Research
Source: Susman and Evered (1978)

However, we have modified the Susman and Evered (1978) model as illustrated in Table 8. We have added and modified phases with an emphasis on stakeholder involvement, as encouraged in engaged scholarship (Mathiassen 2002; Van de Ven 2007). This means that we have not just one initiating phase, but three, and not five iterative phases, but four. Figure 6 illustrates our model with the seven total cyclical phases. The phases in the Hummel action research model are: 1. Identifying problem situation, 2. Studying literature, 3. Identifying goals with key stakeholders (initiating steps), 4. Action planning, 5. Evaluating with stakeholders, 6. Action taking, 7. Evaluating with stakeholders (iterative steps).

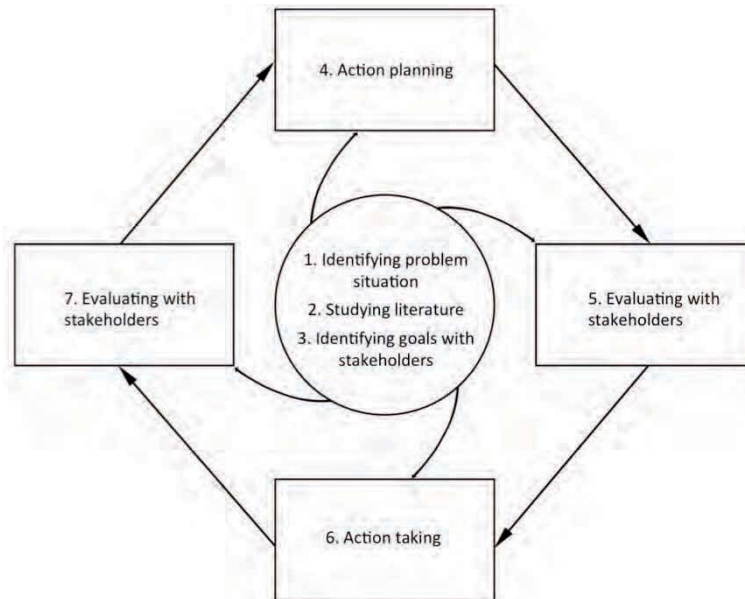


Figure 6 The Cyclical Process of Action Research at Hummel

For clarity, the seven phases are each described consecutively in the narrative, even though phase 1-3 are initiating and 4-7 are iterative, as illustrated in Table 8 and Figure 6. All seven phases were represented in each of the three action research cycles.

As each specific action research project adopts its own unique process (Mathiassen 2002), there is no exact formula for how many cycles action research should adopt. The PhD project at Hummel necessitated three cycles over four years and four months. However, the cycles could have been ongoing, as there is always significant development in the dynamic domain of social media, ecommerce and multichannel.

When the three action research cycles were concluded in Hummel, there was a need for further evaluation that was more substantial than the seventh evaluation phase in each cycle. It also had to be more substantial than Chekland's (1991) sixth phase of reflection on experience and record learning, as well as Iversen et al.'s (2004) tenth phase of eliciting research results. Therefore, following the three action research cycles, it was very valuable to conclude with an additional "cycle" or research period; here, this period is called evaluation. The evaluation period did not include the seven phases, nor was systematic action research conducted. In practice, I did not leave the field but stayed in the field as a manager engaging

with the organization. This allowed for validation of the study findings and results while writing it up, but, most importantly, it allowed for reflection and further learning not only for me, but for the top management and the entire organization.

The core of engaged scholarship is engagement, interaction and dialog with the client – which essentially leads to co-creation of solutions. However, the literature does not include recommendations or examples of such an extensive evaluation period. Nevertheless, it seems perfectly fitting with the engaged scholarship approach, that one of the focus areas and contributions of the evaluation period is closing the knowledge transfer gap between myself as a researcher and Hummel as an organization (Van de Ven 2007), thereby unfolding how and what I, the top management and the organization learnt in the evaluation period following the three action research cycles in section 5.5.4.

5.5 Action Research Cycles at Hummel

Three action research cycles were completed in three years and four months (August 2010 to December 2013). During this time my recommendations were implemented and assessed in the participating organization (Lindgren et al. 2004). Each cycle had seven phases (as illustrated in Figure 6 and Table 8). The three cycles can be characterized as follows:

Cycle 1 ran from August 2010 to December 2010 and is named Digitalization, as the action research was focused on assessing and preparing the company strategically for digitalization. It culminated with the approval of a digital strategy. During this phase my role was an action researcher.

Cycle 2 ran from January 2011 to March 2012 and is named Multichannel, as the action research was focused on preparing the organization for multichannel operations. It culminated with the launch of the global B2C website with pilot ecommerce. During this phase my role changed from an action researcher to an insider action researcher, as I was employed as a manager for the Digital team.

Cycle 3 ran from April 2012 to December 2013 and is named Omnichannel, as the action research was focused on preparing the organization for omnichannel operations. It culminated with the launch of multiple B2C channels and an omnichannel infrastructure and strategy. During this phase my role was an insider action researcher, one who also stayed in the company after concluding the research.

In addition to the three action research cycles, an evaluation period took place from January 2014 to December 2014, as illustrated in Figure 7. This was possible, as I did not leave the research setting, as an action researcher normally would after the defined research cycles. Instead, I stayed in the company and evaluated the results of my findings with the stakeholders, evaluating their learnings as well. The evaluation period is described following the action research cycle narrative. Figure 7 also illustrates, below the timeline, how the four papers of this thesis each reports the outcomes of an action research cycle. The figure is similar to Figure 1; however, it also shows at the bottom when the strategies were launched, e.g., Hummel had effectuated a singlechannel strategy until March 2012, where it launched its B2C ecommerce, thereby effectuating the multichannel strategy. The omnichannel strategy was effectuated during the evaluation period (Jan 2014-Dec 2014) when the company launched its marketing planning, shopping and exchanging across channels initiatives.



Figure 7 Action Research Cycle Timeline in Hummel

A summary of the method and actions in each of the seven phases in the three respective action research cycles is presented in Table 9. As the actions are presented in detail in the table and the case is described in depth in Papers 2, 3 and 4, the narrative of the cycles are focused on a personal account of the action research and its challenges in each phase.

Table 9 Summary of Phases in the Action Research Cycles at Hummel

Cycle 1: Aug 2010 – Dec 2010 Digitalization	Cycle 2: Jan 2011 – Mar 2012 Multichannel	Cycle 3: Apr 2012 – Dec 2013 Omnichannel
Phase 1. Identify Problem Situation		
Hummel needs to “do something about digital” (CEO).	Hummel needs to “get control of the brand and the multichannel sales distribution online” (CEO).	Hummel needs to “build an option to work omnichannel” (CEO).
Phase 2. Study Literature		
Conducted literature search on: - Multichannel - B2C ecommerce	Conducted literature search on: - Multichannel - B2C ecommerce - B2C Transformation	Conducted literature search on: - Multichannel - Omnichannel - B2C Transformation
Phase 3. Identify goals with key stakeholders		
Identify goals in close collaboration with: - CEO - CMO - CSO	Identify goals in close collaboration with: - CEO - CMO - CSO - Steering group incl. IT vendor - Project groups - Country partners	Identify goals in close collaboration with: - CEO - CMO - CSO - Steering group incl. IT vendor - Project groups - Country partners

Goal: - Evaluate Hummel's situation and develop a plan for digitalization	Goal: - Build a global B2C website and ecommerce platform	Goal: - Build systems, processes and governance for omnichannel
Phase 4. Action planning		
- Plan to talk with, and interview, all involved stakeholders in the digitalization project - Plan to present evaluation and recommendations for the top management	- Decide on having B2C ecommerce in-house or out-sourced and plan action accordingly - Set up digital department - Leverage existing B2B functions, processes and systems - Launch global website	- Further build Digital department and digital knowhow - Further leverage existing B2B functions, processes and systems - Launch full ecommerce - Launch omnichannel systems, processes and infrastructure
Phase 5. Evaluate with stakeholders		
Evaluate digitalization plans with: - CEO - CMO - CSO	Evaluate multichannel plans with: - CEO - CMO - CSO - Steering group incl. IT vendor - Project groups - Country partners	Evaluate omnichannel plans with: - CEO - CMO - CSO - Steering group incl. IT vendor - Project groups - Country partners
Phase 6. Action taking		
Leverage internal departments' knowhow: - Initiate relationships with departments - Informally evaluate existing knowhow and processes and their fungibility - Informally evaluate existing B2B systems and their fungibility for B2C utilization Create strategic recommendations: - Develop initial evaluation and recommendation presentation for top management - Present digitalization and multichannel strategy for the Board	Leverage internal departments' knowhow: - Establish work and steering group with IT, Logistics, Finance, Sales, and Marketing department involvement - Use IT department's B2B functions and processes for building integrations to B2C systems - Extend business departments' functions and processes for B2C use - Extend warehouse, Service Centre and systems for B2C use - Extend product images and marketing material for B2C use Leverage internal B2B systems: - Describe existing system infrastructure and product data - Involve vendor or experts to help with data-wash and integrations - Hand over project to responsible job functions (Ecommerce Coordinator) – formalize routines - Utilize ERP system for B2C ecommerce - Extend B2B logistics and finance IT systems and integrations for B2C use Access CMS system: - Decide on building an aligned global platform instead of having multiple non-aligned local websites - Select CMS system and vendor - Use vendor's CMS system and knowhow - Test and refine Access Ecommerce system:	Leverage internal departments' knowhow: - Further utilize IT department's functions and processes for B2C use - Further utilize department functions and processes for B2C use - Further utilize warehouse, Service Center and systems for B2C - e.g., for new packaging, better shipment deals as volumes grew, etc. - Further utilize Finance department's functions and processes for B2C - e.g., for incorporating B2C figures in management reports - Further leverage existing Marketing product images and marketing material for B2C use - Further leverage brand awareness for traffic to the website and brand desire for ecommerce sales - Leverage the Digital department's functions and processes for further digital growth e.g., formalized management reporting, business unit budgets, etc. Leverage internal B2B systems: - Further utilize ERP system for B2C use – e.g., for marking all current products for sale on the B2C website - Further extend B2B logistics and finance IT systems and integrations for B2C - e.g. for automated/faster returns Access CMS, Ecommerce, Payment Systems and IT & Digital Knowhow: - Further access external systems and

	<ul style="list-style-type: none"> - Decide on having ecommerce in-house - Select ecommerce system and vendor - Use vendor's ecommerce system and knowhow - Use vendor's developers in order to customize ecommerce system to fit the company's needs (e.g., avoid cannibalization) - Test and refine - Launch ecommerce system <p>Access Payment system:</p> <ul style="list-style-type: none"> - Select B2C ecommerce payment system - Use payment system - Integrate payment system with ecommerce system and ERP system - Test and refine - Launch payment system with ecommerce system <p>Create Digital initiatives:</p> <ul style="list-style-type: none"> - Set up a Digital Department - Hire two additional employees: an Ecommerce Coordinator and a Digital Communicator - Launch global website - Set up governance processes, SoPs, and structures for ecommerce - Launch ecommerce as a pilot to test B2B and market reaction <p>Leverage the Hummel brand:</p> <ul style="list-style-type: none"> - Align the brand across markets, channels and platforms - Utilize brand awareness for traffic to the website - Utilize brand desire for ecommerce sales 	<p>knowhow</p> <ul style="list-style-type: none"> - Use vendor's developers in order to continuously build and customize the ecommerce system to fit the company's evolving needs – e.g., Created localized country websites on global website with local products - Use vendor's developers in order to build "Brand Button" - a mini version of the website which could be installed as an iframe on a third-party website - Use vendor's developers in order to build "BrandZip" - a product information management (PIM) system - Use vendor's developers to build a mobile website and m-commerce <p>Create Digital initiatives:</p> <ul style="list-style-type: none"> - Create new roles: customer service, copywriter, online B2B support, digital trainee to ensure digital education - Launch full ecommerce - Launch omnichannel infrastructure <p>Leverage the Hummel brand:</p> <ul style="list-style-type: none"> - Further align the brand across markets, channels and platforms - Utilize brand awareness for traffic to the website - Utilize brand desire for ecommerce sales
Phase 7. Evaluate with stakeholders		
Evaluate digitalization implementation with: <ul style="list-style-type: none"> - CEO - CMO - CSO - Board 	Evaluate multichannel implementation with: <ul style="list-style-type: none"> - CEO - CMO - CSO - Steering group including IT vendor - Project groups - Country partners 	Evaluate omnichannel implementation with: <ul style="list-style-type: none"> - CEO - CMO - CSO - Steering group including IT vendor - Project groups - Country partners

5.5.1 First Action Research Cycle: August 2010 – December 2010

Phase 1. Identify problem situation

I met with Hummel's CEO for the first time on 2nd February 2010 following an email exchange where I introduced myself, my background within fashion multichannel marketing and retail, as well as my proposed Industrial PhD project. We discussed how Hummel could potentially benefit from taking advantage of the new digital channels for sales and marketing purposes. He expressed it in the following way: *"We need to figure out what to do about this ebusiness and social media situation. We need to be in on it – not as forerunners, but we need to have the competence, the capabilities and the systems for it. You can help us figure that out, right?"*

Following numerous discussions and deliberations with the CEO and CMO, and a presentation to the International Management team in April 2010 on how leading fashion brands utilized the Internet for sales and marketing purposes (see Paper 1), Hummel became the sponsor and case for this PhD action research project, commencing 15th of August 2010. As mentioned earlier, my first official title was Multichannel Manager and I had the responsibility for setting up social media and B2C ecommerce capabilities within the company.

Phase 2. Study literature

I alternated my time between the Hummel office in Aarhus and the IT Management department (at that time named CAICT) at Copenhagen Business School (CBS) and spent fourteen consecutive days in each setting. My time at CBS was mainly spent reflecting on what I had experienced at Hummel, attempting to address this in an academic research proposal and studying the relevant ecommerce literature. This was challenging for me as a new PhD and action researcher who did not know the CBS institution norms or the ITM department's expectations and politics well. Balancing life between practice and academia certainly was a challenge, to say the least. One of my reflection notes articulated this: *"I have just spent 10 days in CPH at CBS - and not hearing a lot from Hummel. I feel like when I have just started to get a small grasp of what I'm supposed to do here, I have to leave. And when I come back to CBS, I have to start from scratch again. I never make any progress! I have to figure this out."*

Phase 3. Identify goals with key stakeholders (initiating steps)

For some time, the top management had been scanning information on the subject of B2C ecommerce in order to sense and shape this new opportunity, but the administration still needed to learn more about the new business opportunity before being able to interpret what it meant for Hummel. The CEO recalled that ecommerce had been mentioned informally at Board meetings in 2009 for the first time, *“not as a strategic element, more like, ‘we also need to be in on it.’”* He further explained that there were no existing B2C or digital knowhow, skills or resources within the company: *“The only thing I knew was that this thing [digital] was something we needed to do something about. Internally in the company, including myself, we had no such knowledge at all as to what the world or market would bring in the next three or four years [in terms of digital]. So we needed something; we needed capacity, brain and power within this area. So that was actually the only knowledge I really had.”*

The CMO similarly explained the reason for changing the business strategy as a sense of a new dynamic in the market: *“The reason was first and foremost, that we in general wanted to strengthen our digital capability but also competence. We knew that it was an area that Hummel did not possess any significant skills within so [...] we saw the possibility to strengthen our profile. Another reason was that I thought we might achieve some competitive advantage at some point. I didn’t understand to what extent, where and when, to be quite honest. Not a lot had it [digital capabilities] at that point.”*

The CSO also recognized that the market changed because of the Internet, and saw the chaos it created for Hummel; hence, the need for consistency: *“We knew that we were facing some challenges at the time. For me it was especially that we were not talking with one voice as a brand. It was a case of every man is his own fortune – uncontrolled expressions across countries and product categories. Different platforms. Different positions. So the consumer perception was totally different dependent on where in the world you sat. The reason why we had to use digital for cleaning up and aligning was that we realized that consumers gather brand information on the Internet to a larger extend than in the stores.”*

Phase 4. Action planning

Together with the CEO, I planned to talk with, and interview, all relevant stakeholders in the digitalization project within the organization. The CEO was happy for me to spend the first months investigating and evaluating and thereafter presenting an evaluation and recommendations for the top management.

Phase 5. Evaluate with stakeholders

The action plan was individually planned and coordinated with the CMO and CSO without much ado.

Phase 6. Action taking

Next, it was necessary to gradually take stock of the current resources in the company and evaluate how these were applicable for B2C ecommerce. This action included: initiating individual relationships with all the departments in the company, introducing them to ecommerce and showing them what it could mean to their existing functions. Most employees involved had quite a strong reaction to this, as it would mean extra workload on top of their already stressed jobs. In addition, B2C ecommerce was also a completely unknown territory for the employees, and they questioned not only their own competencies and the existing systems, but also the business consequences for the company, stating, “... *but we are a B2B company*” (Logistics Manager).

Although there was a general sense of confusion – as yet, no one had been given any formal direction about the new B2C project, merely informal conversations about the possibilities of using the existing B2B systems and processes for B2C ecommerce - some departments began to have an initial understanding of the project. The IT, Logistics and Finance department started to share their knowhow, and contributed to possible solutions for specific B2C ecommerce system challenges; for example, Hummel had an existing ERP system, Microsoft Dynamics Navision, which had been utilized solely for B2B since 1998. In order to build B2C ecommerce, it was necessary to know how to use the existing data for the new B2C frontend system together with the IT manager. In another example, Logistics already had a day-to-day

service setup with single package delivery for B2B customers that could conceivably be reconfigured for B2C use.

There were, however, some managers and departments who were opposed to introducing B2C ecommerce. In particular, the Sales Director disapproved of the project, saying that if it was decided to launch B2C ecommerce, he would leave: *“The dealers in Denmark would be really pissed off. Even if they get a cut of the sale. I have said that if we do open a webshop in Denmark it will be without me.”* This tension affected the strategy and consequent actions greatly. The ecommerce sales strategy was carefully designed to avoid cannibalization of the existing wholesale accounts by positioning the B2C website as a support tool, and not as a sales tool (e.g., not offering product categories that were widely distributed in the B2B channels, not offering discounts – not even in sales periods - and not providing free shipping). Organization structure-wise, it also meant that the ecommerce project was placed under Marketing and hence missed the knowledge sharing, involvement and commitment from the Sales and Customer Service department, all of which curtailed the commercial ecommerce capability development in some ways. However, by accepting that the project was limited by these conditional factors, the focus of the ecommerce project shifted to developing the systems and IT infrastructure backend, and the B2C website as a product support tool frontend. Inherently, there were no sales or commercial KPIs in the initial ecommerce strategy.

Following the initial evaluation of the company and its existing B2C resources’ fungibility for B2C ecommerce, the ecommerce and multichannel strategy were presented to the Board. The strategy included a 5-year plan for roll out with a budget for building the required IT systems and for hiring of human capital needed for the ecommerce project. I made this presentation in close collaboration with the CEO and CMO, which in itself was an iterative process. The Board approved the strategy without further questions.

Phase 7. Evaluate with stakeholders

The Board’s approval of the strategy indicated a commitment to the new B2C project, and with this commitment, strategy and budget, as well as dedicated human capital, the first action research cycle came to its end. The CEO, CMO and I informally evaluated what we had learnt.

This was done face-to-face and over email, with my own reflections and learnings noted in the process. One of these reflection notes was written like this: *“I have really mixed feelings about the whole thing at Hummel. Love the people. Love the atmosphere. But the missing professionalism and structure makes me a bit nervous. And I should not be nervous! I’m working on a PhD project and on getting Hummel online in a state of art kind of way. But I feel that there are great challenges in terms of logistics, IT, accounts and distribution. I have to search for the answers by myself. I feel a little alone in the project maybe. But I guess it’s always like that when starting a completely new business area. There are no processes in place, no structure and no priority/togetherness. But should I create this? That’s the question. I need more backup in the areas where I’m not supposed to be the expert: IT, Logistics, Buying, etc.”*

At the same time, I started to look towards how we could embark on the next phase together with the top management, which included implementation of the first part of the strategy: a global B2C website with ecommerce. For e.g., the CEO wrote in an email following the Board meeting: *“I’m really looking forward to getting this super important project started up. It was a thorough analysis with good consensus and business perspective. I’m happy that you and your knowledge are in this project. [..] Going forward, we need to concentrate a lot on the PROBLEM/challenge with Denmark. It is especially regarding the chain relations we have. We need to solve this TOGETHER with Simon.”* Hence, the CEO was very aware of the cannibalization conflict and that we needed to find a solution in collaboration with the CSO. It could not be enforced or rushed in any way.

Personally, what I found most challenging in this period was having to divide my time between the company and the business school, as there was always a gap when I returned to Hummel in the otherwise close understanding with my boss (the CMO). I missed out on events and contemplations when I was not in the company setting. I felt like my boss forgot about me when I was not there, therefore easily changing his priorities. One of the reflections from November 2010 when I returned to Hummel after a PhD course in Brussels sums this up: *“I feel very much like an outsider now. Henning is not involving me or discussing any strategic implications with me. At the Als trip, he worded that I was just there to support X!”* This disconnect with one of my key stakeholders was an ongoing challenge. It made me spend more

and more time at the company in order to avoid it.

5.5.2 Second Action Research Cycle: January 2011 – March 2012

Phase 1. Identify problem situation

We continued directly from the first research cycle into the second research cycle as a natural progression of the new B2C strategy. However, following the approval of the multichannel and ecommerce strategy, the CEO reflected further on my initial observations and recommendations for Hummel's growing Internet presence – which was largely uncontrolled. The CEO commented: *"We need to take control of the 'food chain.' Create a central site and make sure that we get all Hummel partners under the umbrella."*

When I interviewed the CSO about this problem situation he said: *"I was shocked when you first showed me that there were 10-20-30 different brand expressions internationally. We should all have been telling the same story. So I was embarrassed that we hadn't been more caring of our brand."*

When I interviewed the CMO about this problem situation he said: *"They [the countries] have been able to do exactly what they found right. There has not previously been a strategy for who should own the Hummel domains – and not a single paragraph about online whatsoever. Not ecommerce, social media or anything. [...] I wish to be able to say in two years from now, 'We own the consumer contact now!'"*

Hence, it was clear to me, that we needed to start taking control of the Hummel brand through digital tools, and one of the major actions was to create a global platform for a B2C website and ecommerce.

Phase 2. Study literature

During this research cycle I still alternated my time between the Hummel office in Aarhus and CBS in Copenhagen. However, more and more of my time was spent at Hummel, as I now had responsibility for the launch of the global website and ecommerce. Recording of my research

setting and actions in an excel sheet was kept each day throughout the years, with the records indicating that 70% of my time was spent in the Hummel research setting. The remaining 30% was spent in an academic setting at either the IT Management department at CBS attending PhD courses, or at a fourteen day research stay in Italy where I focused on conducting a structured and comprehensive literature review of the multichannel literature according to Webster and Watson (2002). I found it very challenging that there were so few Information Systems (IS) papers related to multichannel. Instead, the subject seemed positioned within interactive marketing and branding. I furthermore continuously studied the B2C ecommerce and ecommerce transformation literature, but did not find a consistent literature stream on the subjects in the IS literature.

Phase 3. Identify goals with key stakeholders (initiating steps)

In order to identify goals for the new business in close collaboration with key stakeholders, we initiated a B2C website and ecommerce steering group, as well as cross-departmental project groups. The steering group consisted of the CEO, CMO, CFO, and myself, while all departments were represented across eight project groups. It was essential to include all departments, as the ecommerce site would affect everyone and would be dependent on involvement from all departments once launched. Working closely together meant that expertise was shared and solutions were found by incorporating many different points of views.

The country partners were also involved in identifying goals, as they were key stakeholders due to the fact that their collective websites and social media channels were creating the scattered and diluted brand presence. Instead, we needed to align as a global brand and talk with one common voice. The country partners were gathered at the Hummel Head Quarters twice a year for the International Sales Conference. Here, I would present the strategy for the country CEOs, sales, marketing and web managers, as well as conduct workshops on the detailed strategy for the web managers. Both the plenary session and workshop were seen as group interventions. These were then closely followed up with meetings and interviews with the individual countries to learn about their individual view of roll out of the strategy. The country with which I collaborated most closely in this period was Germany. The German CEO was a key

stakeholder in identifying goals for building the website and for identifying the ecommerce scope in Germany.

The agreed goal was to build a global B2C website and ecommerce platform. As there were numerous ways to achieve this, we first needed to decide on whether to build ecommerce in-house or outsource the operations.

Phase 4. Action planning

Together with the key stakeholders, I started to carefully plan the action steps toward launching the global B2C website and ecommerce. One of the major decisions was whether to handle ecommerce in-house or to outsource it to a professional ecommerce company.

An in-house ecommerce solution (owned platform) would require Hummel to invest in new B2C ecommerce systems in order to establish a Digital department internally at the company. The entire company also had to be educated in B2C ecommerce, and many departments such as Logistics, Finance, Sales, Customer Service and Export would have additional responsibilities on top of their already busy work schedules. However, an owned platform would result in having full control of the new business, i.e., when and where to roll out ecommerce (control of timing and geography), which assortment (control of product mix), and which service levels and branding message (control of branding and governance). This solution would give full control of the brand online and allow for proactively managing potential channel conflicts.

An out-sourced ecommerce solution (third-party platform) would require that we hired a professional ecommerce company to manage our ecommerce operations - from purchasing and fulfillment to website management and customer service. The ecommerce shop would be treated as a normal individual store for which Hummel would allocate an assortment shipped to the ecommerce company's warehouse. The ecommerce company would then ship the products directly to the end-consumer when they purchased from the webshop. The ecommerce company would also ensure traffic flow to the website, and they would service all customer emails and phone calls— meaning that Hummel would not have any direct contact with the end-consumer. This solution had a shared revenue model with a minimum monthly

payment plus payment for services provided by the ecommerce company. Choosing this option would mean that Hummel did not have to invest in building internal B2C ecommerce capabilities, but would treat the ecommerce business as a normal B2B account – for which all departments, processes and systems were set up.

Even though the outsourced solution won great favor with the IT manager and Logistics, as it meant they did not have to change their practices, the solution proved too costly and risky for Hummel. This was mainly because the company was not ready to launch ecommerce in Denmark due to the fear of cannibalizing the existing wholesale channel. Without the Danish market, the earnings would be too low for the shared revenue model. More importantly, it was paramount for us to have full control of the brand across all online sales and communication channels globally in order to manage the potential channel conflict and to create an aligned global brand as identified in phase 1. The CEO underlined this by stating: *“The online sales are not my priority now. Businesswise, it does not matter if I turnover one million, five or ten millions. That is not my worry. But if I don’t get to control the brand and the sales distribution online, that would be a worry.”* It was thus decided to build an internal B2C ecommerce capability and handle ecommerce in-house - with me spearheading the project.

Phase 5. Evaluate with stakeholders

As B2C ecommerce is such an integrative function involving all departments at Hummel, country partners and external IT vendors, it was a highly iterative period of action planning, evaluation, action taking, evaluation and reflection. However the period was not without tensions – especially when crucial decisions of how to roll out B2C ecommerce had to be made.

This tension affected me professionally as well as personally in my action research. As an example, I was away from Hummel for two weeks in February 2011 while I was attending PhD courses, and when I returned to Hummel, the attitude towards the ecommerce project had changed. The personal reflection regarding the day I returned to Hummel described the situation: *“I was really looking forward to getting back, as there were lots of exciting and concrete stuff to get my teeth into. I would receive the proposals from Boozt, GSI, Creuna and*

Netimage – and make them into scenarios + make budgets with Lars, and present the scenarios at the BoD meeting next week. Things were happening, shaping up and finally getting rolling.”

“But! Simon is not willing to open online sales to the Danish market! This is key to success online. This is where we could get the volume and all the marketing effort. We could tie in the campaigns, make all initiatives shopable, set up shop in shops, and so on. Finally my work would make sense!

“He got really emotional about it. Online sales would cannibalize and upset his carefully orchestrated sales network. I get him, understand his point, but what about living in 2011 and forward? The world is getting transparent; you can’t live on funny deals anymore. Especially when growing into a large international company. You have to take control of your own retail channels and take ownership of the customer. Hummel has none of those. So where do I go from here!?? I have nowhere to work. Nothing to make shopable. Everything is in the hand of third parties. Our hands are completely tied. We are just a supplier!”

This was very much kept as an internal frustration, as I knew very well that I still had a lot to learn. All I could do in the organization was to push gently and professionally. It was a balancing act to confront the cannibalization fear and its inherent issues. But at this point, I realized that the job of transforming a B2B singlechannel company into including B2C multichannel ecommerce was not going to be easy. I was going to meet many challenges along my journey.

Phase 6. Action taking

Nevertheless, it was decided to launch an in-house global platform for the B2C website and ecommerce, and for this reason I began to take action steps together with key stakeholders. First, the steering group met with different ecommerce system vendors and chose a vendor that could develop a custom solution to fit Hummel’s unique needs.

Soon after the IT vendor and ecommerce system were chosen, a Digital department was formally created, reporting to the CMO. At this point, my role changed from an action

researcher to an insider action researcher, or a manager-researcher, i.e., managers undertaking action research projects in their own organizations (Coghian 2001). My title changed to Global Head of Digital and I was given the responsibility for the digital organization and department – for building, hiring and managing the team needed for developing and operating the digital projects. The Digital department was expected to initiate all social media, website and ecommerce projects, as well as formulate strategies and governance for the different initiatives. It was a highly integrative department and a hybrid between IT and business (sales and marketing), but the responsibility for development and operation of all B2C front-end facing systems were solely in the Digital department, while the IT department was responsible for development and operation of the back-end ERP system.

According to my approved strategy, an ecommerce Coordinator was hired to coordinate the projects related to IT infrastructure, data and integration. The ecommerce Coordinator would also write standard operating procedures (SoPs) in order to formalize the new routines and processes within Hummel to ensure that all people involved in ecommerce would work in a standardized manner.

The ecommerce system vendor helped to define the system infrastructure and product data structure for the B2C frontend as well as the various integrations. This required quite a large “data wash” - cleaning up the product data and establishing a new structure for future product data creation. The new data structure was dependent on both IT and business resources. As an example, it required: that all product designers would standardize the creation of new product attributes in the ERP system, that marketing coordinators would create new images for the digital media, and that the systems could handle the new and larger amount of data. The company was dependent on the different business and IT processes working closely together, as the resulting product data would be directly exported to the B2C website, making all product attributes and marketing images in the back-end systems visible to the end-consumer on the B2C website. If there were any errors in the data, they would be displayed directly to the end-consumer, which could hurt the brand image. The process of cleaning up and structuring the data creation in the ERP system resulted in Hummel having one central system for creation and maintenance of data, which could be exported into numerous systems going

forward. It also resulted in structured data, which could be aggregated and monitored in order that digital initiatives (e.g., website activity, ecommerce sales, digital marketing campaigns, etc.) could be measured real-time.

Launching B2C ecommerce required the involvement of all departments in the company, and this was certainly not an easy task for me to accomplish. I faced a lot of frustration, resistance and a lack of understanding. At the end of 2011 I reflected in my diary on why the CEO had hired someone like me to do this job: *“Søren hired me to be his ‘Bad Pete.’ He needed someone to go to the different departments and tell them that they are going to have B2C ecommerce. The resistance towards ecommerce is incredibly high within the company. So he needed someone from the outside – someone whom they couldn’t get too mad at – to start implement the hurting changes. That someone is me. I’m a little lady in beautiful dresses, lipstick and high heels. And on top of that I’m professional, social and can stand my own right.”* However, the CEO was a tremendous support. He always gave me the impression that he stood alongside me in every battle, giving me valuable feedback every time I took action on challenging grounds. He would, e.g., follow up on one of my emails, writing: *“There is a TIGER behind the CAT. And that is good.”* - thus supporting my standpoints.

It was however easier for some departments, e.g., IT, Logistics, and Finance, to understand, reconfigure and extend their current B2B systems and work processes in order to cater for the new B2C requirements. Other departments, e.g., Marketing and Creative, had to restructure in order to cater for these B2C requirements (e.g., new photography, packshot³ and video set-up, revised catalogue set-up, revised campaign set-up, etc.). Even though the two departments, Digital and Marketing, were both reporting to the CMO, a divide between the “new digital” marketing and the “old traditional” marketing people became more and more apparent. It hindered the collaboration, as people started sticking narrow-mindedly to their roles and siloes. But it also made the Digital department a very close-knit team that was well aware of its place in the organization.

³ A packshot is a photograph of a product (often on a mannequin), which clearly shows the attributes of the product.

The departments who felt most threatened by the new project, e.g., Sales and Customer Service, did not contribute much, and their existing systems and work processes were therefore not fully reconfigured or optimized for B2C ecommerce. Furthermore, the consistent tension between the existing B2B sales channel (personified by the CSO) and the new B2C sales channel (personified by me) was intensifying the closer we got to launching the website. The CSO and I had numerous emotional discussions, and even though he at times expressed openness towards ecommerce in our formalized interviews and was mentally prepared for the future, he certainly did not act upon the words. This fear of cannibalization resulted in launching just three styles for sale in Denmark when ecommerce was launched at the end of the action research cycle. A fuller range was launched in Germany, as the German CEO did not face the same extent of cannibalization because his market was not as saturated by the Hummel brand as the Danish market.

Phase 7. Evaluate with stakeholders

The end of the second action research cycle was marked with the launch of the global platform for the B2C websites and ecommerce. Local websites with a limited local ecommerce assortment were launched for Germany, Denmark and International. The launch of the website was an important milestone in the project. Suddenly all the abstract talk about how all departments' work would come together became concrete because it became visible. The website made it all tangible, for e.g., if designers made a spelling mistake in the product name - a packshot¹ was missing, a price was wrong, or an export file from Navision had errors - it was all visible to consumers on the website. Finally, everyone could relate to the ecommerce project. People in the functional departments even started saying: *"My friends are asking, why they can't buy all products. Is there something wrong with the website?"* Hence, the cannibalization problem had a new voice from the grounds and up with the launch.

At the same time, sales to online retailers such as Smartguy, Rakuten and Zalando were quickly rising, as we had set up a Hummel shop-in-shop at Amazon.de, and finally had (initial) guidelines for Hummel's Internet presence (social media and websites). We referred to this collective digital situation, which now was an unavoidable part of Hummel's brand presence and turnover, as Hummel's multichannel universe (i.e., Hummel's entire digital universe,

including digital in-store, and specifically how all the digital B2C sales and marketing channels were connected in order to offer the consumer an aligned experience of Hummel). The interconnectivity of all the channels was drawn as a map, which was further developed each year as the channel portfolio evolved (see Figure 8 and Figure 9) and was updated prior to each Sales Conference for use at the plenum presentations and workshops (group interventions). The updated map was also always shown to the interviewees during interviews and it was a hung as a poster in the Digital department. This way of illustrating Hummel's multichannel environment and its development visually was a great help in educating and fostering understanding in the wider organization. Further, the multichannel model was kept consistent throughout the years (even though I made another version of it for paper 3), as it created consistency and a continued understanding of the omnichannel subject in the organization.

The Multichannel Model (Figure 8) as presented at the Sales Conference in May 2011, illustrating the different channel characteristics. The channels colored blue indicated the channels that we could control ourselves. The grey channel (online retailers) indicated the channel that we could not control, as we did not own the channel. The channels outlined with a red ring were the channels, which we had not launched yet, but were in development – at different stages (e.g., mobile, B2C platform, co-creation, gaming, etc.). The solid arrows indicated if we operated the channels, and the punctuated arrows indicated if we just supplied material to support the channel (e.g., we supported online retailers with image material, but we partly supported and partly operated the e-shop in shops, as we would design the shop, upload images and ship to customers). The channels placed underneath the brand (in the middle) indicated the local Hummel websites, which we did not plan to have on the B2C platform due to geographical or ownership issues. Instead, they were required to follow our provided guidelines and implement our website design template, which would make the websites look and feel as if they were part of the global platform.

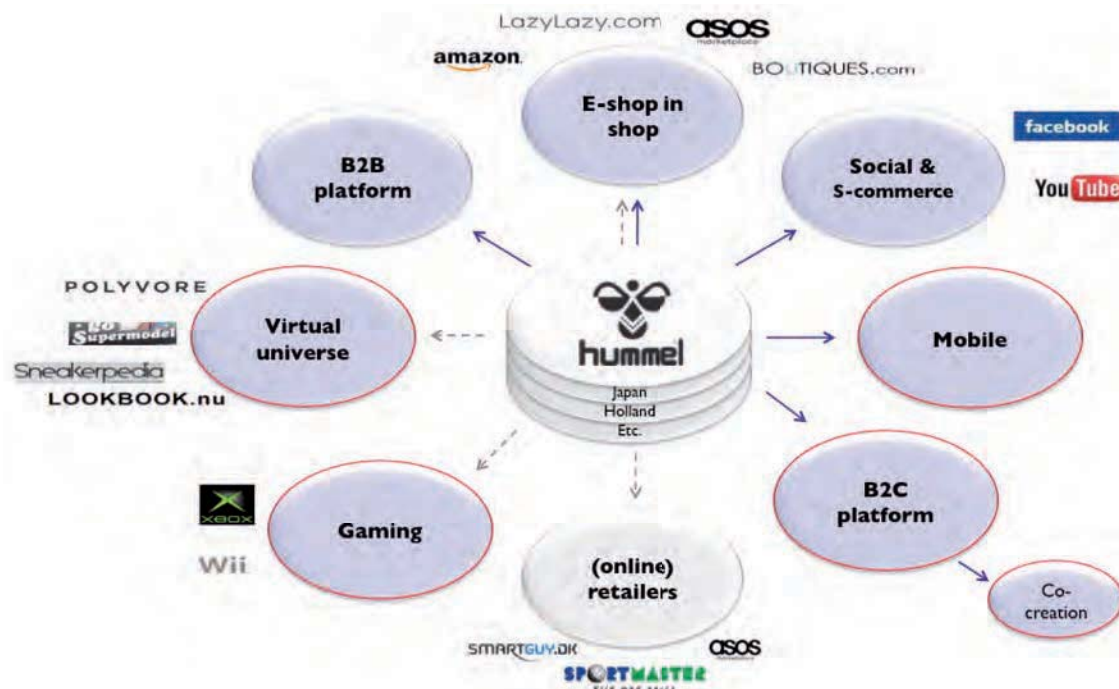


Figure 8 Multichannel Model as Presented at the Sales Conference in May 2011

In the formalized interviews at the end of each year with the top management, we evaluated our multichannel transformation journey and reflected on our learning. At the end of the second action research cycle, the CEO commented especially on the multichannel model: *“The multichannel model has been the biggest eye-opener for me. I never realized how multifaceted the digital environment was. It’s really important having a total picture of our online situation – what we are facing, where we are focusing our efforts, and why.”*

The CMO commented: *“The multichannel model has given me two things: 1. An overview, proactivity (as the model is dynamically updated) and control. And when I have an overview it leads to a plan. 2. A competence in deciding actions for the different channels.”*

The CSO reflected: *“The multichannel model helps me to easily understand where Hummel fits in, where we are going and what is affecting that. If you tried to explain that in words, you would have lost me.”*

Hence, the multichannel model helped to foster an understanding for the complex multichannel environment within which Hummel operated. The model was effective to the extent that the top management actively used it in presentations themselves.

5.5.3 Third Action Research Cycle: April 2012 – December 2013

Phase 1. Identify problem situation

We continued directly from the second research cycle into the third research cycle as a natural progression of the B2C multichannel strategy. However, the problem situation was more difficult to diagnose at this stage due to the multifaceted nature of multichannel – there were many interconnected problems that needed to be identified and solved. The CEO commented on the multichannel infrastructure: *“We need to have the central structure in place first, make it really cool, so that people would be thinking: ‘I would give my left arm to be part of that.’ The multichannel model is easily understandable for everyone. I use it to illustrate how complicated the online environment is, and I use it as an example of the many ways we use the channels. Both on social and web (ecommerce). And then I think it is a good finalizer when I harshly show where we prioritize our efforts.”* However, the CEO also stated that his priority was his existing B2B business and this was not going to change: *“Where we make our money is wholesale. I would rather invest in getting the guidelines and Brand Buttons implemented than investing in our own ecommerce site. Wholesale is where our return on investment is.”*

The CMO had a slightly different view. He argued that Hummel should focus on transforming into a multichannel operation *“Focus on channels has changed dramatically for Hummel. Now we are not anymore just focused on our offline key accounts, our bricks and mortar customers. Now we also recognize the need for and the importance of a Hummel mono-brand store – both on line and offline – as part of being an attractive brand. Turkey is a great example of how that has been executed, and that is a market, which has grown from nothing to being our third biggest market in less than three years. And they have a multichannel approach, which tells us something. It is a necessity (to be agile and able to adapt our multichannel model). We have to master this, and we have to educate our organization in thinking commercially about more channels. One of the key competences (in the job description) for our new Key Account*

Manager is a multichannel focus. We now have a criterion for multichannel focus, understanding and experience. We have never had that before.”

Similarly, the CSO reckoned that a multichannel approach was really smart. However, this was due to the fact that he would collaborate with his B2B partners when selling directly to consumers through shop in shops on external ecommerce platforms such as Amazon. The ecommerce platforms such as Amazon would then become strong Hummel partners: *“Having a multichannel approach is really smart. It is for example less noisy to sell indirectly via shop in shops or online retailers. We make our good partners better and we become stronger through them.”*

Hence, my interpretation of the problem situation was that we needed to build an omnichannel infrastructure where all the consumer facing (B2C) online and offline channels could be aligned and connected, while we were focusing on supporting and protecting our existing B2B business.

Phase 2. Study literature

During this research cycle I stopped striving to alternate my time evenly between the Hummel office in Aarhus and CBS in Copenhagen. Mainly due to personal reasons (I had given birth to twin girls and hence my family needed to settle in one place), but also because I realized that I had to spend more time in the Hummel research setting to get the multichannel operations up and running. I was on maternity leave from Hummel for eight months in 2012, right after the website was launched – but in this timeframe I was present at all strategic and intervention events, as well as working on defining the 2016 strategy.

Although I did have one year and six months maternity leave from the PhD, I made sure to stay in close contact with my supervisor, write a full Hummel narrative, and continuously go back to the literature to study multichannel and B2C ecommerce transformation. At that time, I also commenced searching for more omnichannel literature, as the term started to be more commonly used in the practitioner field. Again, I would meet challenges in the IS literature, as there were no references to omnichannel. However there was a paper in the strategy

literature (Brynjolfsson et al. 2013), but no definition of theory or framework for omnichannel was offered as yet.

Phase 3. Identify goals with key stakeholders (initiating steps)

We had, at this point, come so far in the transformation process and organizational set up for multichannel that we no longer met formally with the steering group and project groups. Instead, the Digital team members worked closely with all the relevant functions to solve both development and operation tasks. Thus, even though it was the same group of people who were involved in identifying goals, it was achieved in a more informal manner. The ecommerce system vendor had also become an important stakeholder in the digital project. I realized that since we did not possess any existing technical B2C ecommerce knowledge internally, we needed to secure a mechanism for integrating the internal B2B IT department and ERP system with the vendor-developed ecommerce system and vendor knowhow.

We resolved this by hiring a consultant from the ecommerce vendor who had an overall business understanding, coupled with technical and system knowhow. The CMO and I agreed with the consultant to work in the Digital team two-three days a week in order to help us develop solutions that would ensure that we reached the digital strategy. This included assisting with integrations to systems from third party vendors, such as payment systems, newsletter systems and social media platforms. The consultant functioned as a link between Hummel IT and external IT developers, as he understood the systems from both sides. This setup worked so well that he also became the team leader while I was on maternity leave. The consultant was my husband and so the setup was especially beneficial for me, as I then never really left my action research setting; I could still recommend solutions in collaboration with the key stakeholders in Hummel.

As mentioned, I began working on a digital strategy for 2016 at the end of 2012. This was the first time the Hummel leadership team worked in a structured manner on setting strategic targets for all departments in the company. I developed four strategic areas for the digital strategy, all under the overarching two goals of 1. taking Hummel from a local, scattered and uncontrolled brand presence to a global One Brand One Voice (OBOV) presence and 2. building

an integrated multi-dimensional online platform that would help secure Hummel's future branding and business plans. The four digital targets were:

1. B2B platform and Key Account Support:
 - a. To develop our B2B platform into an effective sales pushing platform. By 2016, approximately, 18% (ex pre-order) of our total orders would be placed on the B2B platform and should have an increased GM to a minimum of the same level as the total GM.
 - b. To become our key accounts' preferred digital supplier by supporting them with best-in-class product data, as well as digital marketing and activations tools.
2. B2C webshop and global OBOV on hummel.net:
 - a. To offer an aligned Hummel OBOV experience online and availability for the global consumer.
3. Product Data:
 - a. To deliver comprehensive high quality data around each of our products.
4. Social Media:
 - a. To reach 760,000 fans across our social media platforms, and to secure 200,000 of these fans in our own controlled database.

The digital strategy also included a rationale for the targets and a plan for getting there, including the budget and resources needed. This is attached in Appendix D: Figure 16 and Figure 17. The four strategic digital areas also functioned as a framework for the organizational structure in the Digital team in the sense that four functional areas within the team needed to be set up. Further, the digital strategy to Must Win Battles were broken down for each year, where each member of the Digital team had his/her individual area of expertise and responsibility. This worked really well as a guide for recruiting the right members of the team and shaping the dynamics of the digital area in Hummel. The digital strategy also worked well in clarifying which other departments and resources were needed in order to reach our goals, e.g., the B2C webshop was highly dependent on the IT, Logistics, Finance, Export, Sales and Customer Service departments, as well as the ecommerce system vendor, payment system

vendors, newsletter vendor, and so on. The product data were highly dependent on the IT, Design and Marketing departments, as well as freelance copywriters, translators and external photographers.

Ultimately, the digital strategy and Digital department were seen as a new function created within Hummel to bridge the corporate strategy with IT and all other departments in the company with the goal of reaching the end-consumer and the new B2C market. Although this was never articulated intentionally, in reality, identifying goals most often happened by chance when the CEO and I were catching up and talking informally about the digital situation in the fashion world. He would express his wishes – most often not in digital terms, but rather something like: *“I went into this store and the entire wall was just sneakers upon sneakers. How do we differentiate ourselves on that wall? How do we get all our sneakers in there without having them physically on the wall? Can we make a ‘Tesco’ wall?”* After which I would go back to my department, think, and then speak to the ecommerce vendor and the consultant about how we could make the CEO’s wish come true via digital means. It was then that we came up with the virtual wall and the in-store ecommerce displays (explained in phase 5 and in Paper 2 and Paper 4). Later, the CEO said: *“I really like the Hummel shop in shop on Amazon. How do we get a shop in shop on all our online retailers’ websites, so that we can always control how we look?”* For this, we came up with the Brand Button (explained in phase 6 and in Paper 2 and Paper 4).

With the identified digital goals and innovative ideas, it also became clear that we were more and more dependent on IT processes and a strong IT infrastructure to support the systems, platforms and integrations needed for this. Furthermore, we needed a structure for governing the mushrooming digital landscape.

Phase 4. Action planning

Together with the key stakeholders, I started to plan how to implement the defined goals. I had to start by building a new Digital team, as the existing two full-time employees (Ecommerce Specialist and Social Media Coordinator) had left Hummel while I was on maternity leave. It was actually not a negative situation, as the digital strategy required

different skills than what we already had in the team. Hence, it was not just about replacing the employees, it was a task of building an entirely new team for the rapidly growing digital area for both B2B and B2C. However, a major challenge was to find qualified employees who had digital experience in the fashion industry and who understood the workings of a global company that transitioned slowly and organically to an omnichannel operation. I had to create new roles, including: a B2C Ecommerce Coordinator (who would orchestrate the B2C ecommerce channels, develop new channels in close collaboration with the ecommerce vendor and run the ecommerce operation); a Digital Communicator (who would structure the digital communication across all channels, as well as orchestrate and support all Hummel countries and partners in communicating and interacting via digital platforms); a Copywriter (for enriching the product sales texts, the brand communication and the digital marketing campaigns); B2C Customer Service (as requests increased with sales volumes); and a B2B Ecommerce Specialist (to manage the B2B ecommerce platform, ensure that online retailers followed Hummel's ecommerce guidelines, including supporting them with digital content and material, as well as installation of the Brand Button).

Further tasks in the action planning included the ever-recurring issues:– not only how to launch full ecommerce in Germany and Denmark but also how to roll out local websites on the global platform in other countries. Our 2016 digital strategy stated that we should offer global availability for the end-consumer by the end of 2016 – which all managers accepted in the strategy meeting in December 2012, but we were still miles away from taking the first steps toward this plan. I carefully crafted ecommerce reports on the existing small ecommerce and on how we were interacting with end-consumers on the various digital channels. In this way, the top management could see that we were supporting the B2B customers in all that we did, rather cannibalize their business; for e.g., we were driving customers to their shops via the storefinder on the website, referring them to shops via social media campaigns, and servicing customers who wrote and emailed to ask where they could find products. I also placed three large screens in the Digital department, showcasing real-time data from our website analytics, Facebook community, mentions on twitter, etc. aggregated via dashboards. Apart from the awareness of these internal educational tools, the top management received frequent reports on how other fashion companies tackled the cannibalization issue – via insights from the

interviews carried out with industry contacts. All this collectively helped foster a better understanding of the digital universe and the B2C world in the organization.

Phase 5. Evaluate with stakeholders

All plans with stakeholders were continuously evaluated. In fact, nothing was ever put to action without full consensus from all stakeholders. It was really important that everyone was comfortable with how we progressed. Thankfully, this was an easier process than it had been earlier, as we were launching different channels, which meant that all stakeholders could better relate to the digital projects.

One of the subjects we evaluated was the digital in-store initiative. This was one of the first cornerstones of our consumer centered omnichannel strategy, as it fused together the digital space with the physical space (making it omnichannel rather than multichannel). Furthermore, it fused together B2C ecommerce with the B2B retailers. Practically, we planned to develop an ecommerce shop in shop (an individual website for the retailers which was built on our ecommerce back-end) and showcase it on an iPad in the store, with it available on all devices. Shopping assistants could then help customers order a product on the iPad if they did not have it in stock. Customers could also order it from home and choose to get it delivered to the store or to their home – which Hummel would fulfill. In this way, Hummel took some stock risk for the B2B retailer and expanded its physical assortment to a digital “endless aisle” while giving the retailer a 50% cut of the retail price, which was more than they normally earned on products ordered via the B2B platform (for more details, see Paper 4).

The CSO was a large stakeholder in the ecommerce shop-in-shop project, as it connected our digital work with his customers. He stated that the project was a win-win situation: *“It would be a competitive advantage for us. A new competitive advantage and a three times win. A win for the store, a win for the customer and a win for us. So I think its super exciting.”* He continued talking about the brand experience digitally and vaguely about the fact that consumers could not buy directly from Hummel: *“I still see multichannel and selling through shop-in-shop as important, but on the other hand, I’m more and more for going out there to be a first mover within some areas. Because one thing is being strong through your partners, but it*

actually starts with ourselves. If we look at ourselves as the Head Quarter then we ought as a minimum to have an interesting platform where we create the full brand experience. Perhaps we then also should take advantage of that when customers are in the buying mood. Right now you can't really seal the deal so you have to go elsewhere and then frustration arises. So yes, we need to be strong through our partners but I think that I have moved more towards starting with ourselves. And with that said, leveraging the excitement and value, which we have created for people to, for example, purchase."

The CMO also saw the digital in-store project as a competitive advantage for Hummel: *"You would digitalize the physical retail space in order to sell more and in order to offer them a larger profit in the space, yes. They have normal handling cost by selling a product, which they can't show physically. But they get a cut of the sale without spending much time on it, without warehouse cost, shipping cost, returns and claims, etc. It's a pure win for them. It is not just more sales, its larger profit and thereby a larger entitlement for our general physical existence. For what it is worth it can also be differentiating from our competitors, who are still not in the market with screens in-store. And we can place ourselves in a category with brands like Nike and Adidas."*

The CEO reflected on the subject looking towards the future potential: *"There will be a lot more digital in store. In some way or another, we need to use the stores to lead customers to something digital. Every time there is something which they don't have in the store, the assistant can say, 'Come right over here, you can buy everything here. And why not get it sent to your home, so you don't have to carry it.' That will be another thing all together, and therefore we need to consider what to do with our shop in shops. When they are up and running in 2014-15 we need to see what to do to drive online sales through there."*

The CEO continued saying: *"I have said before that I can't see ecommerce becoming a significant business, but if there is one place where I can see it, then it is through our controlled spaces, shop-in-shops, etc. from where we can guide the ecommerce sale. In the beginning, we might give an excessive high proportion of the sale to the local shop that conducts the sale for us, but that's okay, as at the end of the day we end up with the customer."*

However, the direct B2C ecommerce was still loaded with cannibalization fear. The stakeholders might have expressed more openness about the subject, but nothing reflected this in reality. We still only had three styles for sale in Denmark and 78 styles for sale in Germany, out of the 1,100 styles on the website.

It felt like we had not moved forward for a long time. Then suddenly, at the company strategy meeting days in the spring of 2013, the German CEO said in his usual dry manner: *“Well, you can say, we can just open up for all styles now.”* I had previously casually asked when he would be happy to offer full ecommerce in Germany. It was now quite a shock to me, as it came about so non-dramatically. I had become used to gently arguing with facts and figures, but now suddenly there was no need for that any longer. Needless to say, the team back at the office was overwhelmed with the wonderful news. We were moving forward with our plans!

Phase 6. Action taking

The next phase in the action plan included a roll out of full product assortment in Germany. This did not involve any further development to the ecommerce systems, as they were built to handle scalable ecommerce from day one. It was rather a matter of ticking off all current products for sale in the ERP system resulting in the front-end ecommerce system, automatically changing the “Storefinder” button (which was next to all products that could not be bought on the website - helping visitors to find the product in a local store) into a “Buy” button on the website.

Following the launch of full ecommerce in Germany, we commenced rolling out further local country websites (France, Spain, Turkey and UK) on the global B2C website. The main purpose of grouping all countries on one website was first to ensure an aligned brand experience across local websites, and second, to launch ecommerce and offer global availability of Hummel products in 2016 (according to our 2016 plan). However, in the process of rolling out the country sites, it became necessary to further customize the ecommerce system to fit in the different countries’ needs; e.g., France and Turkey - two of Hummel’s focal countries - needed a facility to upload their own locally produced Hummel products. The ecommerce system was

extended so that each country could gain access to their specific part of the backend to upload their own products. At the frontend, all Hummel products would be showcased side-by-side as one aligned global brand.

A large part of the action taking was to hire new employees for the Digital team. There was a good pool of candidates for the digital marketing roles, and we could move an employee from the Sales department to the B2B ecommerce role, but I could not find anyone qualified for the B2C ecommerce role. There were not many global fashion companies with ecommerce in our area and hence not many candidates with experience. This resulted in my covering the role myself with help from the consultant and a student helper, whom we trained for the job. Slowly, the team was up and running and functioned well as integrative roles in the company. For example, the B2C Customer Service employee's function was tightly integrated with: B2B Sales and Customer service (e.g., to align the communication about delivery times or about products that had production faults); logistics service center (e.g., to ensure that the service center was instructed about individual returns and quality checks); export (e.g., to be updated daily on local sales events, licensed Hummel collections, as well as fake Hummel products and social media profiles that popped up, etc.); IT (e.g., regarding products that were not showing correct prices due to a mistake in the ERP system, etc.); marketing (e.g., regarding missing packshots, new catalogues, etc.); design (e.g., special collections with special attributes); and so on. In fact, the Digital department was functioning as an interface between the entire organization and B2C consumers.

The B2C ecommerce sales were steadily increasing every month, but the business was still carefully run as a brand support tool so as not to upset the B2B business. Although it was easily possible to push the sales a lot more, the CEO did not want to focus on sales Key Performance Indicators (KPIs), but rather on giving the B2C consumers an excellent experience when they purchased from, and interacted with, the company. Hence, we did not invest in separate stock for the website, nor did the top management allow for sales pushing activities, such as visible marketing for the ecommerce sites, discounts or incentives to buy.

Nevertheless, we continued to refine and add to the system features in the ecommerce setup so that it would be ready for the large roll out in 2016. One of the resources that could be further leveraged was the existing ERP system and its integration. The data from the ERP system could now be transferred every minute instead of once every hour, as the IT department had become familiar with the ecommerce system, the integration and the data requirements. However, there were limits to how much the ERP system could be expanded. For example, the ERP system could not handle the increasing requirements for rich product data on the website (e.g., videos, product sales descriptions, customer comments, ratings, user generated images, etc.).

After an unsuccessful search for a product information management (PIM) system and a vendor to handle this, we chose to build a system together with our existing ecommerce vendor, who customized a PIM system for the our specific needs. This system was then integrated with the ERP and ecommerce system so that all inventory, prices, product information and rich content could be showcased on the website. The new PIM system could furthermore export data to the Brand Button (a mini version of the Hummel website which was placed on third party online retailers' sites as an iframe that opened as a light box), the mobile site that QR codes linked to the Microsoft Scala software used in the virtual walls in physical stores, and so on. Effectively, Hummel had built an integrated IT infrastructure by carefully wrapping new systems around the old ones that were tuned to the specific needs of the company.

At this point, we also wanted to launch mcommerce, as an increasing proportion of the visitors entered the website from a mobile device. The backend was again further reconfigured by adding a mobile checkout and specific tracking for this platform. However, an entirely new frontend design had to be created, as mobile design and navigation are significantly different from a desktop version.

The new B2C ecommerce business contributed to the company's growth, both directly (by additional business) and indirectly (by influencing or controlling the digital B2C space). The CEO put it like this: *"I think that the hidden benefit will always be a lot, lot bigger. It's like an*

iceberg. I think that for every 1 shoe we sell online, we have influenced 9 sales elsewhere.” The B2C business had notably higher gross margins compared to the B2B business, and was more profitable. The B2C business also created greater awareness of the Hummel brand. For the first time in the company’s history, there was a direct connection between the brand and its consumers. Furthermore, we had built a valuable and relevant set of digital capabilities. We could now take control of the brand’s digital presence and, more importantly, the relationship with end consumer – a strategic control that had significantly enhanced Hummel’s market influence. The CEO noted: *“If we hadn’t taken control of Hummel’s online presence and made some guidelines now, I think it would have been impossible to implement brand control in a few years from now. I have this inner picture; that all the contacts, shops, distributors etc. would have taken control themselves... But now we are slowly gaining the control – taking it back from them. And that is super important, and this is just the start. That’s why I have given it so much attention on CEO level.”*

Phase 7. Evaluate with stakeholders

By now, all managers and employees were used to operating a B2C ecommerce business in addition to the traditional B2B business. The brand website had ecommerce facilities, and all systems were running smoothly. All departments at the company were involved in different aspects of running ecommerce, and only a few regarded the new business opportunity as a threat at this stage. Even the CSO admitted that he had changed from being against B2C ecommerce to supporting it throughout the years: *“There has been a rather big transformation and change in my mind-set within only few years. I have changed regarding [ecommerce]. I know now that there is only one way to go – and I could not even contain that sentence preciously! But I know that we will end up selling full assortment.”*

The CEO similarly reflected upon the cannibalization fear he had previously had and upon the fact that Hummel needed to operate ecommerce nevertheless: *“You know I have this controversy about how much we should push our own ecommerce business. But I don’t see any other way than just making it work. That has been our first strategy, right? The systems just need to work. Now it works.”*

The CMO, however, felt that the company had not moved as fast as desired when it came to adopting ecommerce: *“I know that there is willingness in the organization. But there is inertia, a fear and a change management issue, which still implicates the speed with which we are executing. I’m confident about us moving in the right direction, but I think that we should have been further on by now.”*

Our digital universe and multichannel presence (now often referred to as omnichannel) had evolved dramatically during this action research cycle (see Figure 9). At the end of the period it boasted a variety of B2C ecommerce channels (local websites on the global platform, ecommerce shop in shops and order screens) mobile channels (msite, mcommerce, football game app and QR code app), digital in-store (virtual wall and holograms), etc. Figure 9 also illustrates the interconnectedness of the channels, for example, while the Hummel monobrand stores had their own individual website domain and front-end design, they were integrated with the B2C platform backend that enabled an integrated ecommerce operation. This meant that a customer would be dealing with her local store, but Hummel HQ would fulfill the purchase. In this way, we were building many small individual and local ecommerce websites, which were functioning as satellites for the larger ecommerce setup.

Apart from the growth in channels and infrastructure, Figure 9 also illustrates, in comparison to Figure 8, that channels were deselected. This happened as we got a better understanding of the digital universe and iteration between strategy and developing resources for driving the channels; for example, the gaming and virtual universe were eliminated from the portfolio of channels, platforms such as Google’s Boutiques.com were closed down, and our own co-creation project was never launched, as it turned out to be a too large an investment to develop a platform where individual customers could create their own unique Hummel training gear. However, we would continuously contemplate the different channel options and be open for including and developing channels such as the co-creation or customization channel at a later stage.

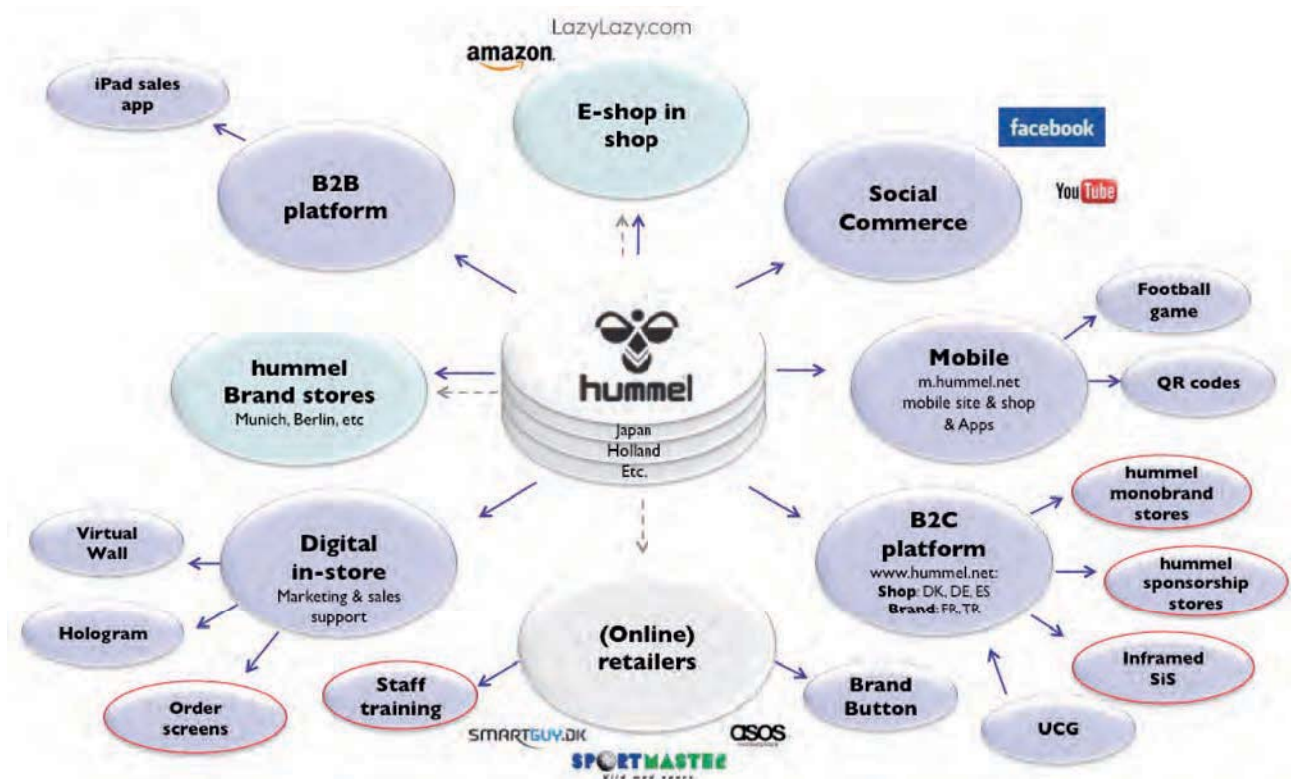


Figure 9 Multichannel Model as Presented at the Sales Conference in May 2013

By now, we had the infrastructure necessary for omnichannel (where consumers could interact with us and shop with across channels), had the team to handle omnichannel, and we had governance and manuals in place to ensure brand control and a consistent and aligned brand (for more detail see Paper 3). Still, the organization had a lot to learn regarding operating omnichannel, as projects such as the ecommerce shop in shop had not been launched yet and there were still only very few products for sale on the website in Denmark.

With the digital strategy and omnichannel structure in place, we concluded the third action research cycle, which, due to my PhD time plan, also was the concluding cycle. However, as mentioned earlier, I did not leave Hummel after having conducted the action research project, as the organization had adopted me as a manager along the journey. This meant that I could enter into a more extensive evaluation period. I concluded the action research cycles with the CEO's reflection on the work we had done thus far: *"We have enabled motivation and knowledge in the entire organization of the importance of the digital launches that we are doing, pushing toward omnichannel. We now have an organization that is motivated to do it."*

And in many ways are prepared to do it. Having built an option to work omnichannel, we have also in a technical sense built an IT structure now, which enables us to do not only B2C and B2B and online handling, but the whole product data handling, which is of eminent importance.”

5.5.4 Evaluation: January 2014 – December 2014

As noted in section 5.4, I found it necessary to further evaluate the action research conducted; beyond that, it was necessary to evaluate not only the study findings but also the impact it had had during the journey and would have on the organization in the future. This extended evaluation period did not include systematic action research or the seven phases. Instead, it allowed for reflection and further learning for me, as well as for the top management and the entire organization. I engaged with, interacted with, and had many dialogs with: my key informants, with my team and members of the wider organization about the study. Together, we explored what my study findings meant for Hummel and what we could learn from it. Practically, this was done by sharing the initial drafts of Paper 2, Paper 3 and Paper 4 to with the top management and my team. Thereafter, I presented the theory and findings of Paper 2 to the entire Marketing group (Marketing, Retail and Digital departments) at our usual Wednesday morning meeting. Here, I answered questions and received feedback from the group, which helped me develop the next versions of the draft. The group now understood what the concept of dynamic capabilities were and I can easily refer to leveraging, creating, accessing or releasing resources in our daily work.

The CEO thoroughly read through my paper drafts and gave me feedback on email, including feedback on confidentiality: *“I don’t have any problems with the papers company wise. There is nothing here that should not see the light of day.”* I thereafter met with him over the summer holidays in his garden, where, for three hours, we discussed the research in depth, our learnings and how it would shape our future in Hummel. The CEO wanted to ensure that I did not feel restrained by still being in the company while writing up the research, saying, *“There is absolutely no problem in portraying the Sales Director as he is. This has been one of your main obstacles, and you should tell the story of how he created the cannibalization myth. You can also say anything about me.”* This helped me overcome one of the challenges mentioned in section 5.2, as it was an emotional task to assess myself, my own team, my colleagues and our

work, while also exposing myself through my diaries and reflections, which I had never shared with anyone before. Knowing that this was all fine with the CEO made me more confident in exposing and including every detail – keeping in mind that I had to continue working with the people mentioned in this thesis.

Amongst many valuable points, the CEO noted that B2C ecommerce might not ever be profitable in itself. It was therefore paramount that to build an omnichannel operation, as the entirety of sales and marketing channels, together with their tight interconnectedness with the end-consumer in mind, was key to success. For the CEO, it was still a priority to get the B2B and B2C channels working together in synergy, as we had done with the ecommerce shop in shop in B2B retail stores and in the way we had supported the B2B online business. He could see now that an omnichannel operation would result in restructuring the company even more. This realization also led us to discuss my future role in the company, Head of Global Marketing and Omnichannel, where my role would be to restructure the entire marketing group and its operations to be ‘digital first’ (for details see Paper 3 and Paper 4). Even though I could not wait to get started in this role, as it meant continuing the omnichannel transformation, the CEO urged me to wait until I had completed the PhD. *“One thing at a time”* he strongly suggested. *“Things take a lot longer in reality compared to what researchers and experts think.”*

Later, after writing and submitting Paper 2, 3 and 4, during October and November 2014, I formally interviewed my key stakeholders, the CEO, CMO and CSO, about their learnings from the omnichannel transformation project and about their attitude towards the PhD research conducted. Even though they always had commented positively on my work as a manager in interviews (as noted in section 5.3.1), it was the first occasion for me to ask directly about the concluded action research, that is, my role as an action researcher as opposed to a detached researcher and its outcome. I asked: “What has been the impact of my being an action researcher as opposed to a ‘normal’ researcher in Hummel”? The CEO answered: *“I personally believe that it is one of the main reasons, if not the main reason, that we have had the effect of the transformation to such a degree as we have had. I’m very confident that it still would have been a great PhD and the results would have been okay, but the effect for my company would*

have been minimal compared to what we have today. No doubt about that. I would have had to build another organization to actually implement on top of your work. It would never have been nearly as effective as your research. Not at all."

"You actually has been responsible for and built a whole digital organization, which we have today. We didn't have that before. We did not have one person taking responsibility for this at all. You have built, hired and managed and been leading this whole organization. So I would have had to hire another person to do the same, but that would never have been such a close implementation together with the research results as we have had now. Now we have actually been able to build the plane while we were flying. That means, all the research results that you had we have been able to implement right on the spot. I think that was a competitive advantage for this company. So that would not have been possible with a normal researcher, not at all."

The CMO reflected:

"I will say quite honestly, we did not have that in mind when we began this journey. But this is what I said was one of the benefits: knowledge. We have learned as a company on all levels from CEO down to sales assistants."

The CSO reflected:

"You made it user-friendly and made us understand that together we are stronger. And why Digital is making Sales stronger... Desk research is far from reality... You are part of reality and have real life experience... I clearly remember your first presentation. You came tumbling down from the sky and knew everything about the market. That was really important for us. It meant that we didn't need to spend time and energy on teaching you what reality looks like for us."

I reflect further on what the top management learnt and what the contributions of the action research were in the practical implications section in Chapter 7.

5.6 Reflections on the Role as an Insider Action Researcher

As an action researcher, I learned from intervening in specific problems at Hummel. I also learned from the feedback from the top management about their learnings and reflections. When they described their reflections, it often helped me to put things in perspective. In this way, I learned much about my contributions to changing practice at Hummel and how I contributed to the organization's collective learning and development.

Being an action researcher carries a dual role: as a researcher and as an executive with the responsibility of implementing a new strategy. It is also an emotional role – especially as an internal-action researcher. Personally, the role has been very rewarding. The distinguishing feature of action research as a methodology is the commitment to improve practice (Baskerville and Wood-Harper 1996) and I believe that I embodied this together with my stakeholders. I really enjoyed the close dialog, interaction and engagement with the 'client': Learning and co-creating solutions together as described in the engaged scholarship approach (Van de Ven 2007).

The feedback from my academic stakeholders also played a big part in the research process. As action research aims to solve current practical problems while expanding scientific knowledge (Babüroglu and Ravn 1992), I always tried to have a wide lens, not just studying relevant literature but also writing up the research. The craft of writing shaped my research. When I was writing, things fell into place and I realized what I was doing. I also learned more when I was being questioned and challenged by my supervisors, co-authors and journal reviewers. Their questions made me go back and revise my case again and again.

While I am relieved not to continue in the action researcher role at Hummel, I will certainly continue the engaging and interacting approach of working in the organization. Similarly, I will also continue to take time for reflecting and writing, as I have learned that these are the moments when learning comes together and I can more clearly articulate strategies and development plans.

6. DISCUSSION

This chapter revisits the research questions of the thesis. It explicates how each of the sub-questions was answered by the research papers comprised in this thesis. A brief synopsis of the four research papers is presented followed by a highlight of the research question that is addressed by each paper.

6.1 Introduction to the Research Papers

In Chapter 3 of this thesis, four research sub-questions were raised that support answering the overarching central question: *How can a fashion company develop and deploy a digital strategy for omnichannel retailing?*

Each of the four research papers in this thesis addresses one dimension of the development and deployment of a digital strategy for omnichannel retailing in the fashion industry by answering a research sub-question. Collectively, the papers present a coherent explanation of the transitions in Hummel's IT and business resources from those required to support a singlechannel business strategy to those aligned with an omnichannel business strategy. Hence, the findings from the four research papers collectively help to answer the central research question and sub-questions.

- Paper 1 describes the transformation of the business context within which Hummel competes. Specifically, it describes the criteria for successful adoption of the Internet by the fashion industry from 2006 to 2012.
- Paper 2 adopts a dynamic capability framework to examine how Hummel reconfigured its resources for B2C ecommerce to align with a new digital strategy. In the early 2000s, Hummel was a successful sports-fashion brand operating a B2B business. The company enjoyed the benefits of alignment between its IT strategy and its business strategy. The major threat to, but also opportunity for, increasing this success, was the emergence of Internet-based competition.

- Paper 3 describes the critical process in this strategic initiative. It focuses on how a company engaging in omnichannel retailing competes differently than it previously did. Each channel operates independently in a multichannel organization, whereas an omnichannel organization must integrate channel operations to provide a seamless brand and shopping experience. A consequence of this shift is that it changes the requirements for IT governance, competence and flexibility.
- The fourth paper describes the development and implementation of the IT strategy required to support the business strategy, integrating sales and marketing channels across geographical markets for Hummel's launch of the omnichannel strategy in 2013.

The four papers collectively explain how IT enabled Hummel's transformation, contributing not only to our understanding of digital strategy within business and IT strategic alignment in ecommerce and social media, but also to the emerging IS literature on multichannel and omnichannel strategies.

An overview is organized in Table 10 with the four research papers, the sub-questions they answer, as well as the research methods applied and key theoretical foundations and contributions.

Table 10 Overview of Research Papers, Research Sub-Questions, Method, Theory and Contributions

	Research Question	Research Method	Theoretical Foundation	Theoretical Contributions
Paper 1	How do fashion brands utilize their Internet presence for communication and commerce purposes?	16 In-depth interviews supported by a longitudinal observation of 15 fashion brand's web presence from 2006 to 2012	We draw on frameworks for assessing, comparing and designing B2C websites from a brand owners perspective (e.g., (Elliot et al. 2000; Ghandour et al. 2011; LSE and Novell 1999; Park and Gretzel 2007; Rayport and Jaworski 2003; Yang et al. 2008)	The contributions of the paper include: 1. An extension of Yang et al.'s (2008) 8C framework and development of 29 sub-categories match the special characteristics of fashion brands. 2. Longitudinal application of the 8C framework to explore how leading fashion brands utilized their Internet presence for communication and commerce purposes from 2006 to 2012. 3. A description of the criteria for successful adoption of the

				Internet and interactive technologies. 4. Development of the CUBE framework to serve as a strategic tool in the development and assessment of websites.
Paper 2	How can a fashion brand such as Hummel develop new IT and business resources to align with its new digital strategy?	Longitudinal case study from 2010 to 2014	We use the dynamic capability approach (e.g., Teece 2007; 2009; Danneels 2011; Daniel and Wilson 2003) to explore how Hummel changed its IT and business resources to align (e.g., Queiroz, 2012; Reynolds and Yetton 2015; Tallon 2008) with the new digital strategy (Bharadwaj et al. 2013; Mithas et al. 2013).	The contributions of the paper include: 1. A dynamic capability approach to IT and business alignment. 2. A systematic set of four modes of action in dynamic alignment – leveraging, creating, accessing and releasing – and an identification of patterns in the way that the modes are enacted. 3. A longitudinal model of alignment that highlights the dynamic interplay among the exercise of dynamic capabilities, evolving digital strategy, and tensions. The study shows that there should always be a degree of tentativeness and that a digital strategy evolves from a broad strategy at the onset and converges as the organization iterates among its strategy, actions and the tensions that arise.
Paper 3	What are the critical IT challenges to be resolved at a fashion brand such as Hummel in the transition from multichannel to omnichannel retailing?	Longitudinal case study from 2010 to 2014	We draw on multichannel literature (e.g., Zhang et al. 2010; Keller 2010; Van Bruggen et al. 2010) and IT and business alignment strategy literature (e.g., Chan and Reich 2007; Reynolds and Yetton, 2015; Sabherwal et al. 2001) to explore the IT challenges of transforming into an omnichannel retailer.	The contributions of the paper include: 1. An extension of Keller's (2010) multichannel framework to an omnichannel framework. 2. An empirical application of the Reynolds and Yetton (2015) model. 3. We challenge the boundary conditions in Reynolds and Yetton's (2015) IT and business strategic alignment framework for multi-business organizations by showing how the channel independence needs to be relaxed; instead, we build in some substantial interdependence in order to achieve the seamless channel experience when moving into omnichannel retailing. 4. We challenge the flexibility notion in Reynolds and Yetton's (2015) strategic framework by showing that retail companies have to handle the outside threat coming from social media instead of the internal threat, which the model describes. Our argument is that

				companies need flexibility, not in terms of the investment cycles they are aware of, but in terms of flexibility regarding the trends in social media that they do not know about.
Paper 4	What are the general recommendations for omnichannel transformation in practice based on Hummel's learnings?	Longitudinal case study from 2010 to 2014	We draw on multi- and omnichannel strategy (e.g., Zhang et al. 2010; Keller 2010; Brynjolfsson 2013) and digital strategy (Bharadwaj et al. 2013) to offer lessons learned on Hummel's transformation into an omnichannel retailer.	The contributions of the paper include: recommendations for development and implementation of the IT strategy required to support an omnichannel business strategy, including: <ol style="list-style-type: none"> 1. Embrace your channel partners in the omnichannel strategy 2. Recognize that successful omnichannel strategy requires deep change. 3. Leverage on the strategic role of the Chief Digital Officer. 4. Evolve the role of the CIO in enabling omnichannel.

6.2 Synopsis of the Research Papers

In the following section, a short synopsis of each of the four research papers that comprise the thesis is presented. The synopsis is structured by first addressing the issue of the paper and the critical theory, after which it outlines what was done, what was found and what was concluded. Finally, it sums up the recommendations with implications for theory and practice. Following the synopsis, the research question the paper addresses is highlighted.

6.2.1 Research Paper 1: Development in Web-presence of Fashion Brands: Adoption of Web 2.0

The paper addresses the issue of the Internet's appearance in the fashion industry context and shows how leading fashion brands have adopted the contingent website, e-business and social media opportunities for sales and marketing purposes.

Taking a brand owner's perspective for developing websites and online business strategies, we analyzed the potential advantages involved in particular strategic choices based on Rayport and Jaworski's (2003) 7C framework and Yang et al.'s (2008) 8C framework, and studied the following eight assessment criteria. In our discussion of the eight criteria, we provided our

definition of the concepts and an operationalization of these through 29 sub-categories/measurements. We specifically indicated for each category: the extent to which the category is useful for furthering branding or sales, whether the orientation is operational or strategic, and whether the communication is one-way or two-way (see Table 11 for an overview⁴):

Table 11 8C Framework

8C-Concept	Branding	Sales	Operational	Innovative	One-way	Two-way
Content	x		x		x	
Community	x		x			x
Communication	x			x	x	
Collaboration	x			x		x
Connection		x	x		x	
Commerce		x	x			x
Context		x		x	x	
Customization		x		x		x

The method for studying fashion brands' adoption of the Internet included a systematic observation of a total of 33 leading fashion brands' websites and Internet presence in 2006, 2008, 2010 and 2012, where 15 fashion brands were represented across all observations, supported by 16 in-depth interviews with fashion brand professionals.

We found that it was possible to validate the use of the eight categories and 29 sub-categories through a longitudinal survey during a period of six years of 15 luxury fashion brands' Internet presence. Through our study, we identified the development regarding three strategic choices:

- Only branding or enhancing with sales
- Only operational or enhancing with innovation
- Only one-way or enhancing with two-way communication

We concluded that we predominantly see the concept as branding or sales, one-way or two-way, and operational or innovative. When we combined the three strategic choices, we got 2³ or eight different combined strategies illustrated with the CUBE-framework (see Figure 10).

⁴ Table 11, 8C Framework, is included in this Thesis to provide a brief overview of the categories. It is not included in this form in the Paper.

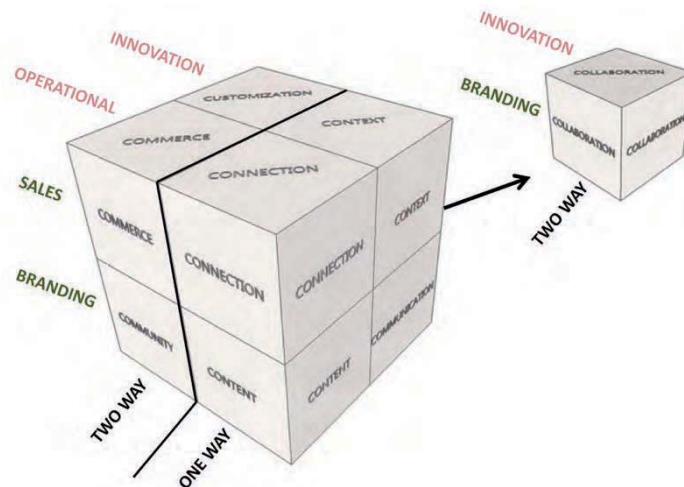


Figure 10 CUBE Framework for Assessment of Websites

Contribution to theory includes our extension of the work of Yang et al. (2008) in the following way. First, we specifically chose a brand owner perspective and identified the three strategic choices that according to strategy literature would be important in designing and analyzing websites. Second, we redefined the concepts to reflect the three strategic choices. Third, we operationalized the 8C concepts through 29 sub-categories. Fourth, we modified the sub-categories to match the special characteristics of luxury fashion brands. Fifth, we conducted the longitudinal study of websites with four different surveys to document the robustness and value of the CUBE model. Finally, we developed the CUBE framework to serve as a strategic tool in the development and assessment of websites.

Contribution to practice includes documentation of the large development in fashion brands' Internet presence partly due to development within Web 2.0 and social media, but also partly due to development in management strategies for reaching current and potential customers. This development in adoption and diffusion of new technologies can guide other brands beyond the fashion industry in strategically developing their Internet presence.

The paper brought us toward an answer to how a fashion company can develop and deploy a digital strategy for omnichannel retailing by answering the first research sub-question: *How do fashion brands utilize their Internet presence for communication and commerce purposes?* The findings provided us with an overview and an understanding of the transformation of the business context within which fashion companies, including Hummel, compete. It described

and conceptualized the multiple sales and marketing channels utilized by leading fashion brands. Furthermore, it provided us with a strategic framework for development and assessment of fashion brands' Internet presence.

6.2.2 Research Paper 2: Aligning with New Digital Strategy: a Dynamic Capabilities Approach

The paper addresses the issue of alignment of IT strategy with business strategy. Specifically, it examines how Hummel developed its IT resources and business resources for B2C ecommerce, aligning them with the new digital business strategy. The paper explains how these resources were developed through leveraging across multiple processes and resources, creating new hybrid resources, accessing external IT systems and skills, and releasing internal resources through the processes of Sensing, Seizing and Transforming capabilities.

Alignment of business and IT strategies is an important and enduring theoretical challenge for the information systems discipline, given the association with business performance in general (Henderson and Venkatraman 1993; Luftman and Kempaiah 2008). However, recent studies have gone beyond viewing IT as a function, recognizing the pervasiveness of data and IT across organizations in functions such as operations, marketing, etc., and encompassing both function and process strategies (Queiroz et al. 2012; Reynolds and Yetton 2015; Tallon 2008). Similarly, organizations are beginning to rethink the role of IT strategy—from a functional-level strategy, aligned but always subordinate to business strategy, to one that reflects a fusion between IT strategy and business strategy. This fusion of business and IT strategy has been coined digital business strategy (Bharadwaj et al. 2013; Mithas et al. 2013).

As more organizations shift towards digital strategy, we need to better understand how organizational IT and business resources and processes are developed to align with a new digital strategy. Our research was thus motivated by the need to better understand how alignment can be achieved when businesses develop and implement a digital strategy that inherently is transfunctional, and leverage IT across the entire enterprise. Whereas extant alignment research has typically looked at alignment between IT function and business

strategies at the enterprise level, it has left open the question of how alignment of business and IT resources occurs across multiple functional processes.

We used the dynamic capabilities approach to examine this issue, since this approach focuses on how companies develop new resources and routines in order to thrive in changing environments. We adapted Teece's (2007) framework of Sensing, Seizing and Transforming dynamic capabilities, making it more concrete by synthesizing it with four different modes of dynamic capabilities (leveraging, creating, accessing and releasing). We conducted a longitudinal study of a sports fashion company that shifted from a pure B2B model to augmenting it with an Internet-based B2C digital strategy over a four-year period.

Our study found that the process of alignment for digital strategy involved a fusion of business and IT strategy. Furthermore, we found that digital strategy requires utilization of resources and processes that are embedded across the entire organization. Finally, we found that new resources were created as a fusion between business and IT, which could link the new corporate business strategy of going digital to the existing resources in the company. We call these resources hybrid resources. Hybrid resources were important to the alignment process because of their integrative activities and functions. Specifically, we identified three lateral dimensions of the integrative work of one of the key hybrid resources, i.e., Digital department. The Digital department not only integrated the first dimension, IT and business (which is the usual focus in traditional alignment studies), but also integrated across various departmental processes and with external partners. Because these hybrid resources integrated across these three dimensions, they were able to support many of the leveraging and accessing actions that required a strong integrative driver.

First, our study supports the view that alignment is an ongoing process (Chan and Reich 2007) as seen by the long time period (nearly four years) required for Hummel's transformation. Second, it provides deeper insights into this dynamic process. We show that this ongoing process follows, on a broad level, the three types of dynamic capabilities exercised, i.e., Sensing, Seizing and Transforming. Theoretically, the sequence of dynamic capabilities in the

process is important as our study shows us that each particular dynamic capability is critical when dealing with specific challenges at each stage of the alignment.

While the literature has noted that IT not only aligns to business, but that it also shapes business strategy, there has been relatively little longitudinal work that examines this dynamic. This case provides rich detail on this basic notion, albeit with a twist. In our study, we view business and IT strategy as “fused” digital strategy (Bharadwaj et al. 2013). Thus, it is not so much the interaction between business and IT strategy, but between 1. the digital strategy and 2. the resources and processes across multiple functions that are being created. We found cycles of moving first from a broad digital strategy, to tentative steps at resource reconfiguration, triggering tensions from existing resources and then shaping the evolving digital strategy (see Figure 11).

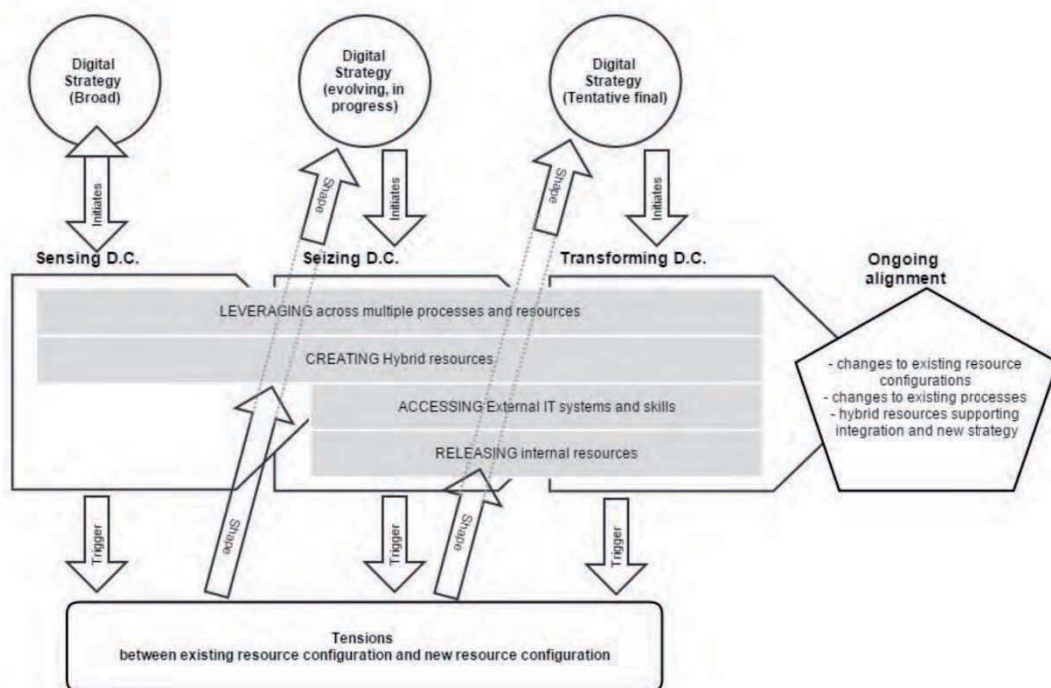


Figure 11 Model of Resource Reconfiguration and Dynamic Alignment for Digital Strategy

Our study shows that organizations have to adopt a flexible and open mind towards how it implements and sustains its strategy. IT research of strategic actions has emphasized the dynamism and agility that IT resources bring (Sambamurthy et al. 2003; Woodard et al. 2013),

whereas our study shows that through the process of alignment, actions taken to change existing resource and process configurations, as well as actions taken to create new resources, may have indirect impact on the digital strategy itself and be one of the sources of the dynamism. Hence, digital strategy should not be viewed simply as a static, stable and objective concept, but as one that is tentative and continuously evolving.

We found that it was paramount for top management to communicate a clear vision of the digital strategy to all levels of the organization. Tensions can arise between new resources and existing resources – and this tension can continuously shape the digital strategy, making it a dynamic process that must continuously be communicated to the organization, thus enabling it to reconfigure its resources accordingly.

Finally, we identified that it was necessary to invest in creating an entirely new department (in Hummel's case, a digital department) to integrate and coordinate the new B2C IT and business resources with the existing B2B IT and business resources in order to align with the digital strategy. It would not have been possible to develop and deploy the new digital strategy solely through existing resources. Hence, there has to be a willingness to invest in the opportunity and create a new dedicated transfunctional team to leverage the existing workforce in a cross departmental manner, as well as a willingness to be responsible for accessing, integrating and managing external resources for the project. When this is done purposefully, the new business will enhance and support the existing business, exemplified by how the new digital strategy proved to support and enhance the existing B2B business.

The second paper brought us toward an answer to how a fashion company can develop and deploy a digital strategy for omnichannel retailing by answering the second research sub-question: *How can a fashion brand such as Hummel develop new IT and business resources to align with its new digital strategy?* The findings provided us with an understanding of alignment as an ongoing process and gave us a deeper, and more granular, insight into the dynamic process of aligning IT and business resources with a digital strategy. The paper offered a longitudinal model of resource configuration and dynamic alignment for digital strategy.

6.2.3 Research Paper 3: Critical Challenges for Business and IT Alignment in Omnichannel Retailing

For decades, retail companies have sold their goods through different outlets, including physical stores, catalogues and home shopping. However, the rise of the Internet and the development of digital devices, including smartphones, tablets and wearables, have created new distribution channels for retailers to exploit. Customers can now shop and interact directly with brands anywhere, anytime. Developing these channels creates new challenges for lifestyle and fashion brands that, for customers, carry high emotional value, and symbolic and status connotations (Kapferer 2008). Customers must integrate their new multichannel, multimedia retail environment to present a coherent and seamless brand and shopping experience to consumers.

The paper addresses how a company engaging in omnichannel retailing is going to compete differently than before. Specifically, it examines the critical IT challenges to be resolved in the transition from multichannel to omnichannel retailing. The company must align its IT strategy with the new omnichannel strategy. Effectively, it must find specific answers to two research questions: RQ A: What are the critical strategic differences between a multichannel and an omnichannel marketing strategy? RQ B: How do IT governance, IT competences and IT flexibility create value in omnichannel strategies?

Within the marketing literature, there is an overlap in the use of the terms multichannel and omnichannel. Here, multichannel retailing is defined as the set of activities involved in communicating with and selling merchandise to consumers through more than one channel (Zhang et al. 2010). Omnichannel retailing is defined as being customer centric rather than channel centric (Brynjolfsson et al. 2013). An omnichannel retailer offers the customer a coherent and seamless brand and shopping experience across channels (Hansen and Sia 2015).

Hence, the critical difference is the independence of channels in a multichannel strategy compared with the interdependence among channels in an omnichannel strategy. The extant strategy literature identifies three critical challenges for companies intending to transition from a multichannel to an omnichannel strategy. The challenges are organizational and governance conditions, technology and data capabilities, and organizational flexibility.

These three challenges map directly onto the three alignment conditions in the Reynolds and Yetton (2015) alignment model in which structural alignment, functional alignment and temporal alignment are the antecedent conditions for governance, competence and flexibility to create value (see Makadok 2010; 2011). We use the Reynolds and Yetton (2015) model as an analytical framework within which to analyze the strategic change from a multichannel strategy to an omnichannel strategy.

To observe an omnichannel transformation in its natural setting over time (Yin 2003), a revelatory case study approach was chosen (Sarker et al. 2012; Yin 1989). The case company was the sports fashion brand Hummel.

The theory building took two forms, both of which required a rich case account. One was to extend the Keller (2010) model of brand management in a multichannel retail strategy to model brand management within an omnichannel strategy. The other was to extend the Reynolds and Yetton (2015) model of business and IT strategic alignment in MBOs to explain performance in an omnichannel strategy in which the assumption of SBU independence in an MBO strategy is relaxed in an omnichannel strategy.

The case study presented four findings with major implications for theory and practice as retailers replace a multichannel strategy with an omnichannel strategy. First, the transition requires the development of a brand strategy for omnichannel retailing. The solution presented here extends the Keller (2010) framework for a multichannel retailer to an omnichannel retailer implementing a global brand strategy (see Figure 12).

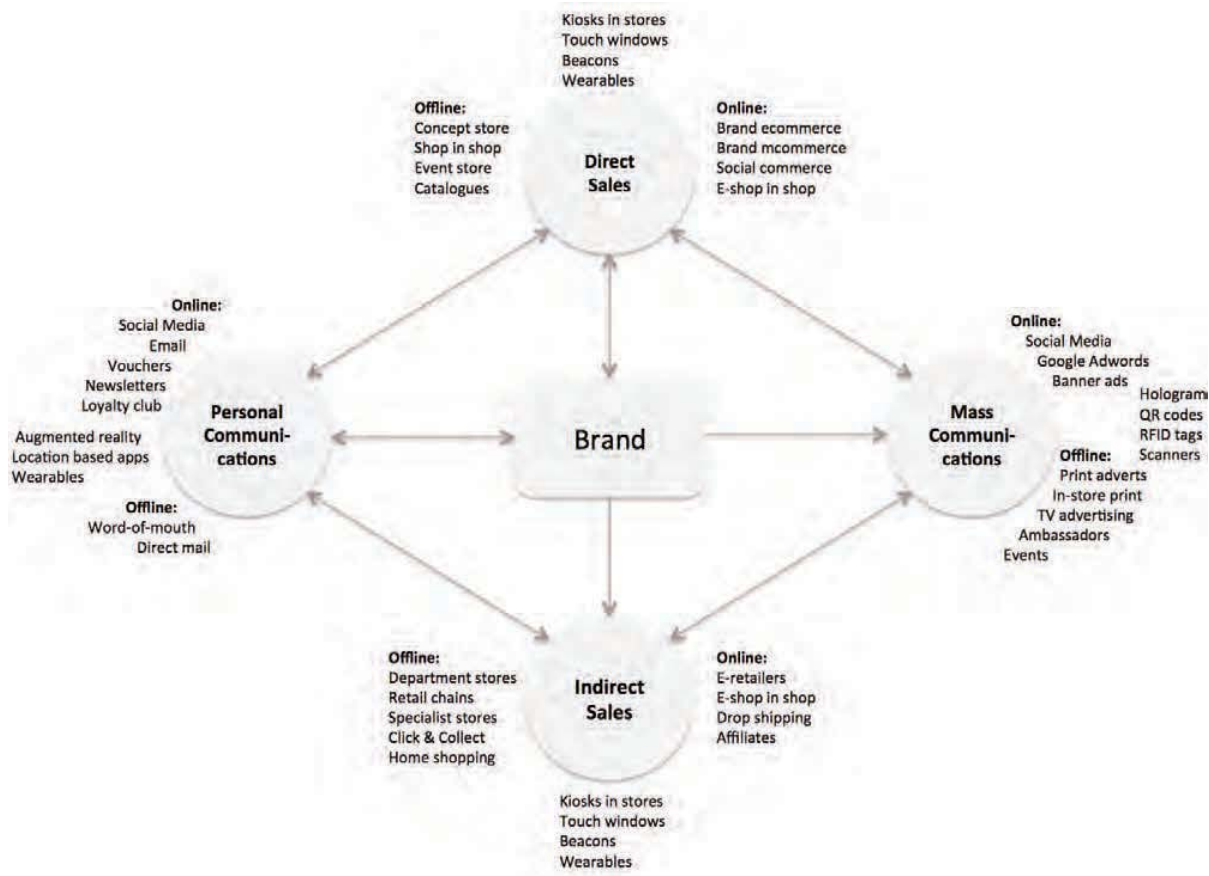


Figure 12 Omnichannel Characteristics

Second, the transition from multichannel to omnichannel retailing requires a fundamental change in the organizational structure. In a multichannel organization, each channel operates independently. In contrast, the omnichannel organization provides a seamless brand and shopping experience.

This strategy requires that the governance structure, the assignment of channel management decision rights, is centralized and owned by the corporate level of Hummel. In this way, customers become customers of Hummel and not of one of its channels. Independent country-based channels that presented variations on the Hummel brand are replaced by interdependent channels, which present a consistent global brand presence across countries. The new governance structure leverages the global brand to create value. As Prahalad and Hamel (1990) argue: “Think globally and act locally.”

Third, to leverage its global brand, Hummel is developing IT capabilities to support a seamless shopping experience. Consumers do not think about the channel by which they interact with the brand. Rather, they view browsing, shopping and interacting, as their aggregate experience with the brand. For Hummel, this required new IT capabilities to integrate customer social media technologies with Hummel's specific channel technologies. It also required new business marketing capabilities that, when aligned with the new IT capabilities, created new sustainable strategic competences (Hansen et al. 2015).

Fourth, changes in customer social media capabilities drive the required new IT capabilities. Critically, these changes are not under the control of Hummel. Instead, they are a function of trends in social media about which Hummel initially had limited exposure and knowledge. In addition, Hummel's core customers are young, active and 'cool.' They quickly adopt the latest technology, social media platforms and trends. Thus, to be competitive, Hummel must match its customers' pace of technological change and always be present on customer devices and social media platforms. This 'speed to customer' rather than the traditional 'speed to market' requires a flexible IT platform and agile development methodologies to support unexpected shifts in social media.

The four findings help to explain Hummel's success in the emergent omnichannel sports fashion market. In combination, they explain how alignment between an omnichannel strategy, the extended Keller model, and an IT strategy, which is based on an extension to the Reynolds and Yetton (2015) model, creates value for Hummel.

The contribution in response to RQ A is an extension to the Keller (2010) model of brand management. This extension recognizes the critical effect of interactions among channels in an omnichannel strategy. The importance of this insight and contribution will increase with the increased use of mobile devices in the retail shopping experience.

The contribution in response to RQ B is relevant to the general domain of platform organizations. The global brand retailer is one example of the general set of platform organizations. The dominant organizational form of the last thirty years has been the MBO.

Moving decisions close to the customer creates value. The corporate center determines in what markets the SBUs compete and the level of services they share. IT services have been a critical component of those shared services. The analysis suggests how the Reynolds and Yetton (2015) model can be extended to model business and IT strategic alignment in these platform organizations, including Hummel and other omnichannel retailers.

The transition from a multichannel to omnichannel brand strategy raises a number of practical implications for an organization. Five are reviewed in the paper: The transition is a revolution and not an evolution; there are major changes for existing staff with few winners and many losers; channel conflict has a significantly increased impact on organizational performance; new key performance indicators (KPIs) must be developed; and not all combinations across channels can be serviced. Hummel has experienced all of these challenges, which all are, to some extent, still a work in progress.

The paper brought us toward an answer to how a fashion company can develop and deploy a digital strategy for omnichannel retailing by answering the third research sub-question: *What are the critical IT challenges to be resolved at a fashion brand such as Hummel in the transition from multichannel to omnichannel retailing?* The paper provided us with a model for omnichannel characteristics and an understanding of how the transition to an omnichannel retailing strategy changes the requirements for IT governance, IT competences and IT flexibility.

6.2.4 Research Paper 4: Hummel's Digital Transformation toward Omnichannel Retailing: Key Lessons Learned

The paper addresses the issue of how the Internet, mobile devices and social media have revolutionized the retail customer experience, enabling customers to research and shop anytime, anywhere, at their preferences. Nevertheless, only few retailers understand how to offer basic omnichannel capabilities to integrate online and offline channels to engage and service the customers.

Achieving success in an omnichannel strategy is a challenging endeavor that remains poorly understood in the literature and in practice. The current discussion focuses largely on choosing the right mix of channels and not on how companies can actually integrate across channels (Bang et al. 2013; Keller 2010; Riggins 2004; Zhang et al. 2010). Others raise the need to rethink pricing and product strategies in omnichannel retailing (Brynjolfsson et al. 2013), but in-depth understanding of the implementation challenges in pursuing an omnichannel strategy remains elusive, for which no theory or framework has, as yet, been offered in the literature.

For this research, we conducted an exploratory case analysis of the Danish sport-fashion brand, Hummel, investigating the “how” question of their successful transition to an omnichannel brick and click company. We found that Hummel underwent the digital transformation along four key thrusts by:

- aligning the online branding globally,
- enhancing the ecommerce support for B2B partners,
- building the omnichannel customer community and
- complementing the physical store experience (see Figure 13):



Figure 13 Key Thrusts in Hummel's Omnichannel Strategy

We concluded that omnichannel requires change to an organization’s technological infrastructure (see Figure 14) and organizational practices. To support the omnichannel

strategy, Hummel's IT system had to be enhanced. Furthermore, we derived four key learning points for organizations with similar omnichannel aspirations:

- embrace your channel partners in the omnichannel strategy,
- recognize that successful omnichannel strategy requires deep change,
- leverage on the strategic role of the Chief Digital Officer and
- evolve the role of the CIO in enabling omnichannel.

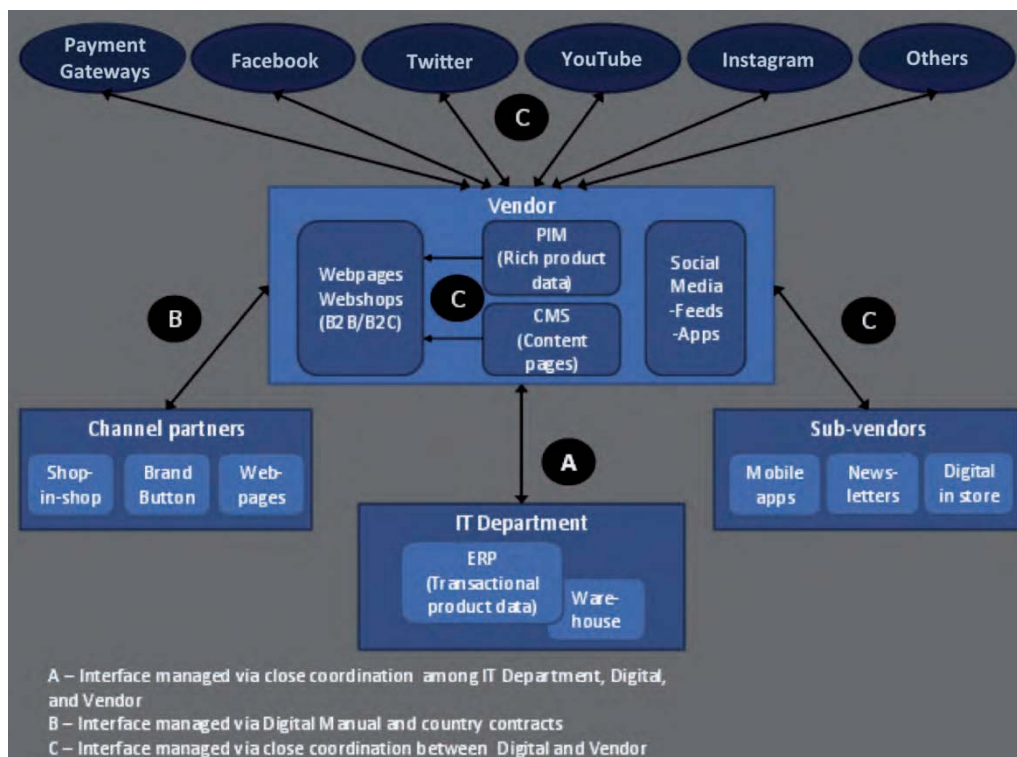


Figure 14 Hummel's Emerging Omnichannel IT and Data Infrastructure

Even though the paper is practitioner oriented, we derived implications for theory, including an observation of how IT had been assimilated into the core business functions of Hummel, which is consistent with the notion of “digital business strategy” by Bharadwaj et al. (2013). The authors argue that organizations should rethink the role of IT strategy - from that of a functional-level strategy that is aligned but always subordinate to business strategy, to one that reflects a fusion between IT strategy and business strategy. Hummel's transformation journey suggests that to be truly omnichannel, a fusion between the business and IT strategy is required.

In summary, as the advancement of digital channels raises the customer expectations on businesses to engage with them wherever, whenever and however, the motivation for a well-executed omnichannel strategy will become ever more compelling. The insights drawn from Hummel's transformation experience provide a glimpse of how organizations, particularly B2B players, can steer themselves toward an omnichannel operation.

The fourth paper brought us toward an answer to how a fashion company can develop and deploy a digital strategy for omnichannel retailing by answering the fourth research sub-question: *What are the general recommendations for omnichannel transformation in practice based on Hummel's learnings?* It provided us with a chronological explanation of how Hummel's omnichannel business initiatives and IT transformations were managed, and it offered lessons learned from the transformation processes, thus providing recommendations for omnichannel transformation in practice.

7. CONTRIBUTIONS

This chapter discusses the implications of the study to theory and practice. The chapter proceeds as follows. First, the theoretical contributions are presented in two main sections and thereafter the practical contributions are presented in three main sections.

7.1 Implications for Theory

A major gap in the literature was the background and motivation for the main research question - *how can a fashion company develop and deploy a digital strategy for omnichannel retailing?* To answer this general research question, we defined how fashion brands leverage their Internet presence and digital resources to create value; identified how a company can develop new IT and business resources to align with its new digital strategy; described the critical IT challenges to be resolved in the transition from multichannel to omnichannel retailing and applied and extended the theoretical frameworks for the development and deployment of a digital strategy for omnichannel retailing; and discussed how a digital strategy for an omnichannel strategy could be applied in practice.

The following describes the key theoretical insights from the thesis. This is presented in two sections. The first presents the epistemological contributions under the heading ‘contributions from action research’ to the transformation to become an omnichannel retailer. The second section presents the ontological contributions under the heading of ‘digital strategy for omnichannel retailing’.

7.1.1 Contributions from Action Research

The literature review revealed that very few qualitative studies have been conducted. Of those few studies, none adopted an action research methodology. Thus, adopting that methodology could give us a deeper understanding of the subject area. To do this, the following section describes the key theoretical contributions of this thesis to the domain of omnichannel transformation. Three contributions are reported here. The first is how qualitative research

may be applied within the area of omnichannel retailing. The second is how existing action research frameworks could be revised. The last contribution is how the role of an insider action researcher could be progressed.

First, the literature review, which was conducted according to the prescriptions by Webster and Watson (2002) and Williams et al. (2009) identified only 45 papers that researched multichannel strategy. Of these, only three papers used qualitative research methods. None of those employed action research. Instead, approximately half of the papers were conceptual papers.

This documents that qualitative research in multichannel retailing is a relatively unexplored domain. We contribute in Paper 2, Paper 3 and Paper 4, to this research domain. Each of these papers describes a qualitative case analysis covering a period of four years and four months. The first theoretical contribution is to have contributed to a deeper understanding of omnichannel transformation through this process approach.

Second, the thesis develops a specific action research model for omnichannel transformation in Hummel (see Table 8 and Figure 6). This was initially motivated by Susman and Evered's (1978) cyclical action research model. Here, that model was extended in two ways. One was that the action research project here placed more emphasis on collaboration and engagement with practitioners, drawing on the engaged scholarship approach of Van de Ven (2007). Specific phases with stakeholder involvement, collaboration and feedback were added to the action research cycles.

The other extension was to include a specific reflective phase. The literature on action research (Checkland 1991; Iversen et al. 2004; McKay and Marshall 2001) adopts ex-ante a pre-set close to the action research cycle. Here, we found that the action research process within the domain of digital strategy does not have a pre-determined close. Rather, the core of the digital strategy development and implementation is a continued iteration between actions, tensions and the strategy itself. Hence, there was a need for an extended reflective period to further

evaluate the action research conducted, the study findings, and their impact both during the journey and on the organization in the future.

The third contribution draws on my reflections as an insider action researcher over the course of four years and four months. The literature on action research presents limited coverage on the implications of being an insider or manager-action researcher (Coghian 2001). I believe that these reflections contribute to the limited extant literature and understanding of functioning as a manager-action researcher. It is a highly emotional role, with tensions between the competing demands of practice and academia. The reflections begin to explore this duality of the role and the effects of using one self as a research instrument over a long period of time.

7.1.2 Digital Strategy for Omnichannel Retailing

The literature review identified a number of theoretical implications including implications of working in the new subject field of multichannel and omnichannel business strategies, and the alignment of this with IS strategies. However, this limited research has been published outside of the domain of IS research. There is a major theoretical gap in the IS literature to which this thesis contributes. The four research papers are an attempt to address this gap and, specifically, to understand how to align IT and business resources with the new digital strategy of omnichannel retailing.

Researchers argue that it is necessary for companies to develop digital strategies because the digital future is already here (Bharadwaj et al. 2013; Mithas et al. 2013; Westerman et al. 2014). However, the extant literature does not provided frameworks to guide the development of a digital strategy for omnichannel retailing. To address this general challenge, the thesis presents a set of theoretical frameworks. These are the CUBE framework presented in Paper 1; the model of Resource Reconfiguration and Dynamic Alignment for Digital Strategy in Paper 2; and the Omnichannel Characteristics framework and the extension of the Reynolds and Yetton model of business and IT strategic alignment in Paper 3.

First, the CUBE framework helps to determine a company's strategic choices to develop its website, social media and Internet presence. This was not termed digital strategy in the paper. However, we argue that, since the CUBE framework helps to assess how to leverage digital resources to create value for the company, it is essentially a mechanism for developing a digital strategy (see the definition of digital strategy in Chapter 3 and Paper 2).

Second, we were motivated by the need to better understand how alignment can be achieved when businesses develop and implement a digital strategy that leverages IT across the entire enterprise. The extant alignment research typically models alignment between a single IT strategy and a single business strategy. It does not address the question of how alignment of business and IT resources occurs across multiple lines of business, each with its own business strategy. Based on our empirical findings, we developed the Model of Resource Reconfiguration and Dynamic Alignment for Digital Strategy. This guides the development of a digital strategy on a granular level (see Paper 2).

Third, we provide a definition of the term omnichannel retailing (see Paper 3 and Paper 4) and show that the shift from a multichannel strategy to an omnichannel strategy changes the way companies compete by changing the requirements for the three drivers of profit: governance, competence and flexibility (see Paper 3). We illustrated how governance, competences and flexibility (three of the four profit drivers in Makadok's (2010; 2011) theory of profit) create value in omnichannel strategies by extending the Reynolds and Yetton (2015) alignment model. This model shows how increases in IT structural alignment, IT functional alignment and IT temporal alignment, increase IT governance, IT competences and IT flexibility, respectively.

With respect to IT governance, we challenged the boundary conditions of the Reynolds and Yetton (2015) alignment model. Specifically, we extended that model to include interdependences among business units. This extends the Reynolds and Yetton (2015) model to explain the effects of governance on value creation in omnichannel strategies. It also has potential implications for business and IT strategic alignment in other forms of platform-centric businesses.

In addition, the shift from a multichannel strategy to an omnichannel strategy requires that the multichannel brand strategy is extended to model the benefits from channel interdependence and interactions in an omnichannel strategy. Hence, based on our research findings, we extended the Keller (2010) 'marketing integration' framework, which offers a comprehensive overview of individual direct and indirect channel options and characteristics, to an 'Omnichannel Characteristics' framework, which recognizes the critical effect of interactions among channels (see Figure 5 in Paper 3).

7.2 Implications for Practice

As this is a practice based PhD, there are numerous significant implications for practice that we offer. Most implications are described in Paper 3 and Paper 4; however, we will explicate the contributions in this section with further insights from the Hummel case. To unfold these, we divide the following into three main areas: 1. organizational contributions, 2. IT competence contributions and 3. brand strategy contributions.

We will use statements from the top management during the evaluation period (January 2014 – December 2014) to formulate the contributions for the company as well as unpack revenue, organizational and IT competence results. As an example, when the CEO was asked about the overarching contributions to his company, he answered: *"The contributions has been vast in the sense that if you see it from a complete overall perspective it has actually given us a possibility for reaching the business targets that we set forward in our 2016 strategy plan. Without the PhD we would not have been able to reach these at all. So you can say, that's the umbrella of the achievements – that it has enabled us to reach the targets."*

Hence, we will unfold the umbrella of contributions to practice in the following sections.

7.2.1 Organizational Contributions

Omnichannel is not just about adding ecommerce channels or integrating online and offline channels. The transition from singlechannel to multichannel and to omnichannel retailing requires fundamental changes in the organizational structure. For Hummel, in the

singlechannel organization, all strategic and operational aspects of the business were focused on serving one channel and one group of customers. Therefore, it entailed no major conflict of interest. In the multichannel organization, Hummel commenced opening new channels (e.g., physical stores and ecommerce) and started to interact with the end-consumer. Each channel was operated independently and was carefully designed to avoid cannibalizing on existing channels. In contrast, the omnichannel organization needs to provide a seamless brand and shopping experience for the end-consumer. To do this, sales and marketing channels have to be aligned and integrated, and brand control has to move from the channel level to the corporate level. Deep organizational change to break the entrenched silo mindset is crucial to achieve omnichannel. At Hummel, this is a continuous journey, which is mainly achieved through four means: CEO and top management commitment, re-structuring the corporate organization, taking a strategic non-cannibalizing position and recognizing that it is a balancing act that requires persistent persuasion.

CEO and Top Management Commitment

The commitment of the CEO, CMO and Hummel's owner to the pursuit of omnichannel strategy was clearly evident in Hummel. Transforming the company for multichannel and omnichannel had consistently been one of the top priorities in Hummel's strategic plans during the last four years. The CEO's strategic hiring of the Head of Digital to initiate this project was instrumental in driving the omnichannel agenda. The clarity of his strategic focus set the tone in the organization and was critical in aligning the employees' behaviors at every level. In particular, his understanding of embracing a digital strategy at the initiation of this project in 2010 was evident when he said: *"We need to figure out what to do about this ebusiness and social media situation. We need to be in on it – not as forerunners, but we need to have the competence, the capabilities and the systems for it."*

To the end of this project in 2014, when the strategy had been iterated and refined, he said: *"I can say that going from single to multi has not been straightforward. We have gone far beyond what we thought that we could achieve in the digital area. We have enabled a motivation and knowledge in the total organization of the importance of the digital launches that we are doing – pushing toward omnichannel."*

Still, he acknowledged that the company had much further to go: *“In many aspects we are actually in the omnichannel position right now, but in many aspects we still have some way to go. But we know what to do and it’s properly a question of expanding and just doing better what we are doing already.”*

Re-structuring the Corporate Organization

The transition from multichannel to omnichannel retailing implies a fundamental shift in the way companies compete and hence also for the organizational structure. In the multichannel organization, each channel operates independently, creates value independently and hence, each channel manager is rewarded for the individual turnover of his or her channel.

Contrastingly, in the omnichannel organization, the channels have to be collapsed and integrated.

As Hummel could no longer work in silos, the company had to re-organize to be more integrative and work cross-functionally to handle the increased complexity, allowing for a seamless brand and shopping experience. Re-organizing for the digital transformation required utilization of resources and processes for Hummel that were embedded across the entire organization. These resources were created as a fusion between business and IT, which could link the new corporate business strategy of going digital to the existing resources in the company. Specifically, the Digital department showed the way of integrative work by first integrating IT and business in Hummel, second by integrating various departmental processes and third by integrating with external partners. Hence, the Digital department was leading and supporting the transformation of the organization toward omnichannel.

The CEO said: *“It is simply a transformation of the entire organization. The PhD has actually contributed to leading the transformation. It is not only a technical thing. It is certainly a transformational and organizational thing.”*

The Digital department was the transformational department that helped teach Hummel to develop new IT, business, as well as hybrid resources to align with the digital business strategy.

The Digital department was a transitional department. The disciplines and roles were built as the strategy evolved, and as the strategy evolved and the resources and processes got more embedded and incorporated in the core areas of the company, the Digital department also had to evolve. As the department was transitional, the roles it encompassed could potentially be fused into the core areas/departments; e.g., digital marketing could be fused into marketing, ecommerce front-end could be fused into sales, ecommerce and omnichannel infrastructure back-end development could be fused into IT, product data into a new data management function, etc.

Most importantly, Hummel learned to think 'digital first'. As a result, the company was merging the Digital, Marketing and Creative departments into a new Marketing and Omnichannel department with the Head of Digital as leader. Hence, the omnichannel transformation did not end with the Digital department; rather, it commenced there. Next, the Digital department's learnings and capabilities were to be further integrated and instilled into the wider organization – incorporating the next push for the omnichannel transformation.

However, the transformation from multichannel to omnichannel can also result in a downside for some of the existing employees. The transition from value being created in the individual channels through increased sales to value being created at the corporate level through global brand management and collaboration across channels has implications for channel managers. Some may feel that they have lost their independence and been stripped of their power. Their expertise has not changed, but it may not comprise the same critical role in value creation in the new omnichannel business model as it did in the previous model. Further considerations are the country CEOs. They might not be able to control and manage the brand as was previously possible; instead, they would be following corporate guidelines and helping to align the brand for long-term value.

For the global brand and IT managers, as well as other employees in the omnichannel center, however, there would be many opportunities. Players in these roles are mostly new highly technically trained recruits with university degrees, unlike many of the existing staff with singlechannel or multichannel capabilities.

A Strategic Non-cannibalization Position

For Hummel, it was initially not possible to integrate channels, as the company was constrained by its legacy structures. This meant that strong channel conflicts would occur if channels were integrated abruptly. Instead, the initial B2C ecommerce strategic direction was developed with attention given to how it would be positioned, relative to the existing B2B business. The ecommerce sales strategy was carefully designed to avoid cannibalization of the existing wholesale accounts by positioning the B2C website as a support tool, and not as a sales tool (e.g., not offering product categories that were widely distributed in the B2B channels, not offering discounts and not providing free shipping).

However, this strategic position does not lead to omnichannel retailing, as it does not deliver a seamless brand and shopping experience for the end-consumer. We know that customers judge a brand by their collective and holistic experience of all interactions with the brand. They do not think about channels or internal constraints with which a company might battle. They just want to shop the brand conveniently wherever and whenever it suits them. The top management and the CEO started to recognize this, even though there was still a long way to making it reality. The CEO commented: *“Where we before said, that we just needed the systems to work, I think that, as soon as we have the logistical setup, we need to offer something so that people can say, it actually pays off going there to have a look.”*

Nevertheless, channel conflict is largely inevitable in omnichannel – and especially in a B2B company that introduces a B2C business. In Hummel, there was resistance to changing the entrenched B2B mindset, to introducing new B2C processes, to the extra workload and to the potential cannibalization of existing B2B sales.

The previously dominant physical store channel would naturally be competing with online, mobile and future new channels. However, there are various solutions that can resolve the conflict at an operational level, such as: offering exclusive products to large B2B customers, creating partnerships and shared earnings with B2B partners, integrating ecommerce in physical stores, and taking other initiatives exemplified by the Hummel case. In an

omnichannel strategy, channel conflict threatens collaboration across channels, which is a critical component of the strategy. We must thus embrace it, explore solutions and define how to collaborate across channels and partners. To enable this, the IT systems must provide the transparency to identify the source of the conflict and the flexibility to support a collaborative solution, without increasing dynamic misalignment.

Persistent Persuasion

The transition is a major strategic change without a proven model to copy. It is not about adding more channels, but about handling a lot more complexity to make a seamless world a successful business. If Hummel gets it wrong, the company may have real problems. The complexity includes: building a new corporate IT platform to integrate the channels; implementing a new organizational structure and writing all the new job descriptions; recruiting new IT, global brand management and marketing resources; and retraining and letting go of existing resources. These are all on a critical transition path with limited opportunities to mitigate the risks involved.

Moving toward an omnichannel strategy is a revolution for Hummel, but it will have to continue to take slow steps in the implementation. It was the sheer efforts of persistent communication and persuasion that got the company to this point in the transformation. The Digital department actively promoted omnichannel stories through various means, e.g., celebrating quick wins (e.g., Facebook growth, Hummel Football Game app downloads reaching certain thresholds), helping to excite (e.g., through the highly visible onscreen flashing of “Hummel’s real people in action”), and regularly reporting benefits (e.g., process savings, referrals from the Store Finder, etc.) to senior management through the Board of Directors reports. For example, given his concern with possible cannibalization, the CSO was initially very hesitant to embrace the new digital channel, but after much “education” and demonstration of the related benefits, he noted: *“I have probably been a bit old school in relation to what I called ‘compete’ with our existing business. I have maybe moved towards calling it supporting and helping our existing business. And I have gained a better understanding of how many consumers use the Internet for information and inspiration. There are actually a lot of*

consumers that end up buying the goods in the shops because they had a great brand experience online.”

Understanding this complementary interplay between the online and offline channels was crucial to “mastering the omnichannel game,” but changing people’s silo mindsets in their respective channels has been and remains a formidable challenge. It was a slow journey and a careful balancing act where cannibalization and channel conflict constantly were taken into consideration. But through the various initiatives introduced, Hummel clearly set in motion the transformation journey. The CEO noted: *“We have enabled motivation and knowledge in the entire organization of the importance of the digital launches that we are doing, pushing towards omnichannel....we now have an organization that is motivated to do it. And in many ways are prepared to do it.”*

7.2.2 Digital Strategy Contributions

As noted earlier, digital strategy is an organizational strategy formulated and executed by leveraging digital resources to create value. In Hummel’s case, developing and implementing a digital strategy had requirements for the company’s IT capabilities. Hummel had to develop new IT capabilities to support a seamless shopping experience. Customers do not think about the channels through which they interact with Hummel; rather, they view browsing, shopping and interacting as a holistic and collective direct experience with the brand. This requires not only new IT capabilities to integrate customer social media technologies and the brand’s own channel technologies, but it also requires new business capabilities that, when aligned with the new IT capabilities, creates new sustainable strategic competencies. Below, we illustrate how this PhD project contributed to achieving business and IT alignment and how it impacted the IT infrastructure at Hummel.

Business and IT Alignment

Prior to this project, Hummel enjoyed a classic business and IT strategic alignment. Now, four years and six months later, this project is contributing another dimension - a digital strategy alignment, that is a fusion between IT and business strategy. The digital strategy was initially

developed by the digital department, but is now an integral part of every strategy in the company. The digital agenda has become more embedded across the organization, i.e., all employees at Hummel have been influenced by the digital transformation and digital initiatives, and capabilities have been assimilated into the core business and IT functions of the company, and have made digital initiatives part of the ordinary jobs. The CEO commented on the digital transformation saying: *“Digital is shaping the company going forward. If I should put one word to it, it is transformation. It is simply a transformation of the entire organization. Not only thinking and working with, but actually knowing what this whole digital thing is and how can we work it into every single part of the strategy - that we have now. None of that would work without a digital strategy at the same time. So it is a transformation. That is working with something that we were not even close to working with four years ago.”*

It is changes in customer technology capabilities that drive both the required new business capabilities and the new IT capabilities at Hummel. Thus, in order to be competitive, Hummel must match its customers’ pace of change and always be present on customers’ devices and social media platforms. The CMO explained how Hummel now had gained IT capabilities so that the company was able to react to market conditions and customer needs: *“We knew that we needed to strengthen our capabilities, we just didn’t know how –or how much of an impact it would have back then. Now we have knowledge and we have structure because we have the tools that have been developed via your knowledge, work, research and possession of skills. So our ability to react to market conditions, customer needs and own branding conditions has increased dramatically.”*

IT Infrastructure Impact

Another implication was the impact on Hummel’s IT infrastructure. To support the digital strategy for omnichannel retailing, Hummel’s IT system had to be enhanced. Beyond the tighter integration required between Hummel’s websites and the back-end ERP systems for its B2B and B2C ecommerce, there were also issues related to the IT infrastructure, as it needed to support a new set of “rich” product data. Examples of such data included the uploaded packshots, images and photos, campaign and catwalk videos, 3-D animation, size guides, and even qualitative texts such as sales descriptions, customer ratings and comments. These were

often the resources used for digital marketing and were generated by designers, marketing personnel or consumers themselves.

A new Product Image Management (PIM) system was therefore built to be a data hub that could import product data not only from the ERP system (e.g., style name, style number, color, size, price and stock level) but also from various other social platforms such as YouTube and Instagram. At the same time, the system could also export data to other platforms; for example, through QR codes (data for a mobile product information site to which the specific QR code linked), to the Brand Button (data for the product-specific iframe on retailers' websites), to the virtual wall in stores, and to the B2C ecommerce system (e.g., the rich product data, which the ERP system did not contain, e.g. videos, size guides and ratings).

In addition, feeds and updates to and from the various channels had to be integrated into the IT infrastructure. Instagram pictures, for example, were imported into the website once every hour, the local Facebook page was embedded into the local website front-page, and the names of the players who completed all the fields in the Football Game app were imported into the dedicated page on the website. Similarly, data from Facebook was imported into the Football Game app, and player data from the Football Game app was exported to the newsletter database, which was also connected to the Hummel websites – thus making it possible to collect newsletter sign-ups from many platforms and still store them in one central place.

However, the technical capabilities required (e.g., social media integration, rich product data management or digital-in-store innovations) were not readily available in-house. Hence, Hummel's decision was to acquire such capabilities from external ecommerce vendors. Hummel chose to stick to a main vendor who also managed Hummel's projects with other vendors when necessary. The decision to rely on external ecommerce vendors proved to be highly effective. First, it was very scalable. It enabled the rapid ramp-up of Hummel's digital capabilities during the early years, but as the development stabilized, such deployment efforts were gradually scaled down. The arrangement also offered flexibility as Hummel learned that it was not possible to source all digital capabilities to support its omnichannel pursuit from a single ecommerce vendor. Other vendors had to be engaged to fill in gaps in expertise (e.g.,

hologram, mobile apps or newsletters) as Hummel tried to keep up with the evolving customer needs and the technological advancements.

Hummel's emerging IT and data infrastructure and the various interfaces were managed by the Digital department in collaboration with the IT department, the B2B partners and the Vendors. While the integration between Hummel's ecommerce websites and backend ERP was largely managed in collaboration with the IT department, the Digital department took ownership of the digital channels and the new set of "rich" product data (i.e., PIM system, content management system and related social media integration), with the help of the IT vendors. Being data owners meant that the Digital department had to ensure integrity of such information, as they were exported to be shared with other digital channels.

The project's impact on Hummel's IT infrastructure coupled with technical advances in Hummel's B2B customers' own IT infrastructure meant that the company would soon have to upgrade its core infrastructure, including the ERP system as well as a new B2B facing PIM (product information management) system. The CEO explained that one of the top priorities would be to ensure further development of the IT and digital infrastructure for omnichannel initiatives: *"Having built an option to work omnichannel, we have also in a technical sense built an IT structure now, which enables us to do not only B2C and B2B and online handling, but the whole product data handling, which is of eminent importance. So I think, that it is only fair to say that we are putting a lot of emphasis on the IT structure of the business. And coming from a system of Navision, where we prior to this project had no connection what so ever with the digital world, it is now quite closely connected. And going forward, one of the top priorities we have is to make this whole digital and IT structure work together."*

7.2.3 Brand Strategy Contributions

As an omnichannel strategy centralizes governance structure, channel management and decision rights, and customers become customers of Hummel at a corporate level, there is the need for a strong consistent global brand image across countries: thinking globally and acting locally. This has implications for the development of a brand strategy in omnichannel retailing.

Below, we explicate how the project contributed to centralizing and aligning the brand, elaborating on how this also transformed and supported the existing B2B business at Hummel.

Consistent Global Brand

As described in Chapter 4, Hummel was facing the threat of brand dilution in 2010, as the Internet made the scattered and localized branding transparent to the consumers. There were numerous different versions of brand expressions, profiles, products, prices and even logos displayed around the world. Hence, one of the major practical contributions of this PhD was to align the brand across countries through digital media (e.g., social media) and IT platforms (e.g., global platform with localized websites). It would be an ongoing journey to continuously aim for alignment (One Brand One Voice – OBOV), but Hummel now had the platforms, tools, structures and processes for the journey.

The CEO expressed Hummel's transition from a diluted brand to an aligned brand, saying: *"We have aligned our own communication and we have aligned regional, and we are on our way of reaching an international alignment. We have the platforms aligned now, meaning that countries have the same platform. Which we were not even close to having before. I think we had 22 or 24 different platforms [websites] a few years ago, which we have now changed into one. So that is one achievement of the digital department."*

The CMO reflected similarly on the journey of achieving brand alignment across countries: *"If we go back, remembering where we began, as a wholesale company and a brand that was completely diluted internationally at least. Not linked in any way, except heritage. We did not have a go to market plan or presence that was OBOV – one brand one voice at all. We have been on a journey from a very singlechannel focused company, driven by wholesale regionally, to multichannel, selling direct and enabling wholesale customers to buy differently – and more – and then to omnichannel now. We still have a way to go, but it is what we are investing in and operating within, so I would say, yes we are in the omnichannel era right now."*

The CSO explained how the alignment and coherency created through digital branding also affected the branding in the physical B2B stores: *"We have first and foremost the possibility to*

communicate with one voice because of platforms, structure, processes and tools. Now we are getting closer to the McDonald effect. In the international Go-to-Market group we can now speak one language because we are united on a platform and in a network digitally. That we can use for a sales strategy in the physical stores. I have realized that you can't start this in a store and then go digital. Because digital is first in the value chain."

Managing the Brand Alignment

However, in order to move toward omnichannel retailing, it was not enough to align channels internationally and create a coherent brand across channels. Omnichannel retailing also required a strong brand with a clear brand position. Weak and undefined brands would not hold up in the transparent and interactive omnichannel world. Therefore, brand management was essential in an omnichannel strategy.

One of the contributions of this project was structuring the brand interaction. Hummel had to place great emphasis not only on which brand message it should send out in the various channels but also on customizing the messages, images and purpose of interaction for each individual channel (e.g., the Social Media Matrix in Paper 4). Staying very close to the Hummel customers and fans enabled Hummel to grow the community from 13,000 members in 2010 to 1.5 million members at the end of 2014. The size of the community mattered, as we found that there was great value in the data, analytics and insights the company received from the community's interaction with the brand. For example, when Hummel launched "Karma" as the main brand promise in 2012, analytics showed that less than 1% of the website visitors clicked on the Karma related pages. Similarly, we found strikingly few likes on Karma posts on social media. These insights prompted the company to refine the brand strategy.

Hence, because of the emergence of interactive digital media and big data, Hummel started to co-create the brand together with fans and consumers. This underlines that a company must be open minded and flexible when developing a digital strategy for omnichannel, as it requires deep changes to develop a consumer centric approach. It is an iterative process between aligning IT and business resources with strategy: not only clarifying and aligning the brand but also reorganizing and aligning the organization for this new way of competing.

Transformation of the Traditional B2B Business

The development in brand management, due to the new B2C digital resources, proved to transform and enhance the existing B2B business as well. The 'Brand Button' and 'Brand Zip' were built to support the B2B retailers, and the 'storefinder' on the B2C website created traffic to the B2B stores; the digital knowhow that the company had developed then helped boost the B2B online retail sales. The iPads with ecommerce shops for 25 individual B2B boutiques not only enhanced the sales, but also connected the online and offline world, offering the physical stores an 'endless digital aisle.' All in all, the digital initiatives helped glue together the online and offline world to give customers a seamless brand experience. Hence, one of the contributions of this PhD was the transformation and growth of the traditional B2B business. The CEO commented on this fact, saying: *"Regarding business, we now have the professional tools and the capability to deal with online retailers in a successful manner, which we didn't have before. It is in fact today close to 12% of our total worldwide sales. It was below 1% before."*

The CMO highlighted that the project also contributed to the growth of the B2B business, saying:

"Yes! [Because of digital, the entire business has grown]. It has quadrupled, if not more, in that period. The biggest growth has been with our wholesale customers, but their growth has been a lot due to the fact that we had this project going. Otherwise we could not consult them or serve them the products and wrap it up with product data, with the whole consulting on how to bring to market, etc. So digital is an instrumental discipline in order to enable this growth."

Similarly, the CSO commented on the new digital capabilities that helped augment the B2B business:

"Sure, we generate sales online ourselves, but there are also a lot of sales generated because of the branding via digital platforms. Had we not invested in digital knowhow, experience and skilled employees then our value chain would not be complete. We would have had a large gap – and no matter what we did in terms of products and marketing campaign it would not have an impact if it was not executed online."

He further commented on the complementarity of the new B2C digital capabilities that supported the existing B2B business: *“You have facilitated, coordinated and developed a setup, which has made Sales – me and my people – stronger. Direct and indirect. This thing about walking hand in hand it’s only really good if you are making each other more attractive. But in this case it is actually Digital which has made Sales more attractive.”*

7.2.4 What Can Other Companies Learn from the Hummel Case?

Other companies looking to develop and implement a digital strategy for omnichannel could derive learnings from the Hummel case. First, it is essential to have the continued support of the CEO – both in terms of understanding the impact of digital strategy on IT, business, brand and organization, but also in terms of understanding and promoting the digital strategy into all other strategies in the organization. Second, it is necessary to invest in creating an entirely new department (in Hummel’s case a digital department) to integrate and coordinate the new IT and business resources with the existing IT and business resources to align with the digital strategy. It is not possible to develop and deploy a new digital strategy solely through existing resources. In other words, there has to be a willingness to invest in the opportunity and create a new dedicated transfunctional team to leverage the existing workforce in a cross departmental manner; it also requires being responsible for accessing, integrating and managing the project’s external resources. Third, when this is done purposefully, the new business will enhance and support the existing business, exemplified by how the new digital strategy proved to support and enhance Hummel’s existing B2B business.

For other companies aspiring to omnichannel retailing, the mentioned brand and business implications illustrate a way to align their brand through similar tightly knitted digital initiatives. Taking control of the brand online is a must in the digital age, as weaving the brand communication across channels and markets is at the heart of omnichannel. Companies must ensure that their customers are met with an aligned and seamless brand expression, regardless of the channel with which they interact. For Hummel, this meant gathering local websites on a global platform, aligning across social media by governance mechanism and communicating

globally through an aligned campaign and communication plan. It meant refining and clarifying the brand strategy whenever consumers reacted to, and interacted with, the brand messages. It also meant integrating the new B2C business with the existing B2B business by seamless digital omnichannel shopping: taking social and communication initiatives. All this, together with other digital initiatives, was always developed with a consumer centric approach. Other companies could gain from introducing similar initiatives, while recognizing that transformation is not a quick fix but an ongoing process that will change and adapt simultaneously while iterating the omnichannel strategy, brand strategy, as well as the organizational resource development.

Developing a digital strategy for omnichannel and achieving alignment is an ongoing challenge for all companies. Recall Burberry from the introduction, the company that had shown the way toward omnichannel retailing for many aspiring companies. Recently, there have been studies indicating that Burberry is currently not aligned. The studies show that the brand, which previously ranked as the leading digital genius in 2011, 2012 and 2013, is now lacking behind brands such as Coach (which had a better integrated search and store inventory check on the website) and Gucci (which had a 'best' in class mobile platform). While Burberry is still the leading company in integrating the channels and creating a seamless brand and shopping experience for consumers, the reason that the company is lagging behind now is that it is restrained by an aging website infrastructure and an unsuccessful upgrade to its mobile site, resulting in a limited product information view (L2 2014). Thus, while Burberry has the omnichannel organization in place and has a crystal clear brand, it is currently lacking in its IT developments.

Hence, developing a digital strategy for omnichannel retailing is an iterative process between aligning IT and business resources with strategy, clarifying and aligning the brand and reorganizing for the three drivers of profit: governance, competence and flexibility.

8. CONCLUSION

This final chapter presents concluding comments on the study. It discusses the limitations and threats to validity of the study, and it provides suggestions for future research. The chapter concludes with a personal reflection on how the omnichannel transformation might continue at Hummel.

8.1 Overview of Results

In the Introduction Chapter of this thesis, we described how Burberry was one of the few successful examples of a fashion company that had transformed into an omnichannel retailer, offering an integrated, coherent and seamless brand and shopping experience across channels and markets. The intent of this thesis was to document and understand how to align business and IT strategies for a global fashion brand so that we could explain how to be as successful in developing and implementing a digital strategy for omnichannel as Burberry had been and to theorize about how others might achieve this.

We conducted a structured literature review on multichannel and identified a major gap in the wider literature on multi- and omnichannel and IT strategic alignment, leaving us with little understanding of the development of a multichannel retailer or the transition from being a traditional B2B company to becoming a multichannel retailer, including the IT challenges contingent on moving from a singlechannel strategy to a multichannel strategy. The other major gap revealed by the literature review is the emphasis on marketing strategy to the partial exclusion of IT strategy in the wider multichannel research. The major contribution of this thesis is addressing this gap.

Hummel became the case company for this PhD when the author was employed to do action research for the company (i.e., apply intervention to address a problem of a specific client while at the same time contributing to academic knowledge). In 2010, when this project was initiated, the main problem for Hummel was, according to the CEO: *“We need to figure out*

what to do about this ebusiness and social media situation. We need to be in on it – not as forerunners, but we need to have the competence, the capabilities and the systems for it.”

To do this, the researcher applied the engaged scholarship approach and action research method to document a long journey of Hummel’s transformation and its process of reconfiguring and developing its resources to align with the new business strategy for B2C multichannel ecommerce and omnichannel retailing. We were able to study closely the company’s transformation from being a singlechannel sport-fashion supplier before 2010 to becoming a multichannel retailer in 2012, and then changed again in 2014, thereby taking the initial steps to becoming an omnichannel retailer.

The collective results of the four papers and this thesis detail Hummel’s journey toward omnichannel, illustrating the structure and process of a global digital strategy for an omnichannel retailing company. Specifically, the four papers document the IS transition from a singlechannel business strategy to an omnichannel business strategy. We described the transformation of the business context within which Hummel competes, as well as the criteria for successful adoption of Internet presence by leading fashion brands. Based on this, we provided a framework for different strategic options of Internet presence for branding and sales purposes. We then adopted a dynamic capability framework to analyze how to develop resources for this Internet presence. Illustrated by the Hummel case, we examined how the company reconfigured its resources specifically for B2C ecommerce in order to align with the new digital business strategy. We described the critical process in the strategic initiative to accomplish an omnichannel approach and analyzed the shift in functional, structural and temporal alignment with the new digital strategy. Using Hummel as a case company, we empirically tested a framework for multichannel marketing and sales, and extended this to an omnichannel retailing framework. Finally, we presented the strategic digital initiatives illustrated by the Hummel case, and described the development and implementation of the IT strategy required to support the business strategy, integrating sales and marketing channels across geographical markets.

Each research paper in this thesis answered a research sub-question, which collectively contributed to answering the overarching research question: *How can a fashion company develop and deploy a digital strategy for omnichannel retailing?* As a whole, the thesis (including the cover paper and the four research papers) explains how IT enabled the digital transformation toward omnichannel retailing, contributing to our understanding of digital strategy within business and IT strategic alignment. In particular, the thesis contributes to the emerging IS literature on multichannel and omnichannel strategies. In practice, the research supported Hummel's transformation and provides guidelines for other fashion brands wishing to make similar omnichannel transformations.

While the insights we have gained are useful and transferrable to other companies, the omnichannel transformation will look different for each individual company, depending on its particular industry, its portfolio of B2B and B2C customers, its organization and IT resources and capabilities. Hence, there may be several equally effective ways of transforming into an omnichannel operation (also referred to as equifinality). The transformation of Hummel documented in this thesis and its comprising papers have a strong flavor of B2B. An omnichannel transformation for a B2C company will look very differently. However, the strategic framework that we have provided is applicable, we believe to a large extent, for any company – no matter the composition of B2B and B2C customers and channels.

In our study, we view digital strategy as “fused” business and IT strategy (Bharadwaj et al. 2013) because digital strategy requires use of resources and processes that are embedded across the entire organization. Thus, it is not just about the interaction between business and IT strategy, but also between digital strategy and the resources and processes across multiple functions that are being created.

We view omnichannel retailing as a fundamental shift from multichannel retailing. The shift changes the way companies compete by changing the requirements for the three drivers of profit: governance, competence, and flexibility (Reynolds and Yetton 2015). In a multichannel organization, value is created within each channel. In the omnichannel organization, the independent channels of the multichannel retailer are integrated, and value is created at the

corporate level - meaning that channel management, control and decision rights must be centralized. Here, the major benefit from centralization is not cost reduction from standardization, as argued by Hodgkinson (1996), but from strengthening brand control by aligning business and IT strategies to create value (Keller 2010; Reynolds and Yetton 2015; Zhang et al. 2010).

In sum, our study shows that with digital strategy, organizations have to adopt a flexible and open mind toward how they implement and sustain their strategy. Whereas IT research of strategic actions has emphasized the dynamism and agility that IT resources bring (Sambamurthy et al. 2003; Woodard et al. 2013), our study shows that through the process of alignment, actions taken to change existing resource and process configurations, as well as those that create new resources, may have indirect impact on the digital strategy itself and will be one of the sources of the dynamism. A digital strategy for omnichannel retailing should not be viewed simply as a static, stable and objective concept, but as one that is evolving and tentative. There will always be a degree of tentativeness. The strategy will evolve from a broad strategy at the onset, changing and converging as the organization iterates its strategy, its actions and the tensions that arise. Hence, no omnichannel transformation can be planned fully in advance. As organizations and their top management proceed in their transformation process and better understand the impact of digital, one should continuously look for opportunities to iterate and improve in close collaboration with all involved stakeholders.

8.2 Limitations

As all research is subject to limitations, this research also has a number of limitations. Four limitations are reviewed here.

First, the study is limited by featuring only a single case. Some researchers would argue that one cannot generalize from a single case and that the single-case study therefore cannot contribute to scientific development (Flyvbjerg 2012; Jurisch et al. 2013). However, Flyvbjerg (2012) argues that the case study method *“is a necessary and sufficient method for certain important research tasks in the social sciences, and it is a method that holds up well when*

compared to other methods in the gamut of social science research methodology” (p.241). It is suitable for studying complex social phenomena, as it typically answers “how” questions when studying contemporary phenomenon in a real-life context (Yin 2003). We believe that by: 1. adhering to Iversen’s (2004) six criteria for action research, 2. delivering a substantial narrative that approached the complexities and contradictions of real life (Flyvbjerg 2012) and 3. systematically reporting all evidence, we ensured that the investigation was scientifically valid with the purpose of generalizing to theoretical propositions for the particular type of problems.

Second, the study is limited to the fashion industry. However, we believe that the strategic frameworks presented in the papers and the collective practical implications given are useful for, and transferable to, other retail sectors, e.g., lifestyle, auto and leisure industries. The retail sector underwent a major transformation due to electronic commerce in the 2000s, and is now starting to innovate with technologies such as social media, mobility and analytics – moving toward omnichannel retailing. Part of the engaged scholarship approach of this thesis was to collaborate with industry contacts and test the frameworks (e.g., 8C framework, CUBE framework or omnichannel framework). These were successfully applied to both the furniture industry (Fritz Hansen) and jewelry industry (Fabergé and Evita Peroni). Observations according to the 8C framework were furthermore conducted in the sport industry of 20 sport-lifestyle brands in 2011 and 2012, which again validated the framework but, more importantly, gave valuable insights to Hummel’s competitive environment. These insights were used practically when designing and developing Hummel’s first global website.

Third, the study is limited by focusing narrowly on ecommerce in the action research narrative of the omnichannel transformation process. In reality, digital marketing (online campaigns, newsletters, banners, apps, etc.) and social media (community building and posting on Facebook, YouTube, Instagram, etc.) were also an important part of the transformation process at Hummel and hence a large part of the action research. However, not every intervention could be included here due to space constraints and choice of research focus. Had we included digital marketing and social media studies, it would potentially have confused the story and placed greater focus on marketing than IS, as the multichannel field already is cross

disciplinary, with strongest contributions to the marketing literature. Accordingly, this thesis has focused on the study of IS issues (ecommerce, alignment of IT with business strategy, IT infrastructure for omnichannel, etc.). We recognize that these IS issues are closely interlinked with marketing issues, which is also pointed out, to some extent, in Paper 3 and Paper 4. We suggest that this interrelationship of IS and marketing in omnichannel retailing should be further explored in the future.

Fourth, limitations also include limitations of the method of study. In action research, the researcher is not an independent observer (Iversen et al. 2004); instead, the researcher is an actor and a research instrument in the context. Therefore, there is a potential internal validity threat to the findings due to the researcher's potentially biased perception of the outcomes. To mitigate this threat, the researcher applied Iversen et al's (2004) six criteria for designing action research to ensure both rigor and relevance in the research (see methodology section above for a detailed description). In addition, the top management team at Hummel reviewed and endorsed the findings. Subsequent research adopting different methodologies would resolve this potential validity threat.

Furthermore, action research requires that the action researcher is present throughout the study, as the action researcher is a research instrument. One validity threat to the findings was that the action researcher was on maternity leave from Hummel for eight months in 2012, during the third action research cycle. However, in that timeframe she was present at all major strategic and intervention events, as described in detail in section 5.5.3. We therefore believe that the absence did not affect the research results.

8.3 Future Research

The submission of this thesis marks a symbolic end to the research project. However, there are naturally several aspects and improvements one could wish to develop further before considering the work truly complete. It is my hope that the body of work represented by this thesis provides fertile ground for further research in the omnichannel retailing area. In the following section, we present five suggestions for future research.

First, the most immediate direction for future research is to continue the research that was not completed due to the time limits of this project. Paper 3 is a research working paper that potentially could be completed in 18-24 months, after the omnichannel implementation is complete at Hummel. At that time, it would be possible to give a full account of how the transition turned out in reality. However, we are convinced that the findings presented in Paper 3 are not challenged by the implementation not being fully complete. There will be additional interesting contributions following another cycle, and it is likely that these will be strongly related to IT flexibility. Specifically, we suspect that future analyses will contribute to our understanding of how IT flexibility contributes to Hummel's performance and the challenges involved in reducing time to market.

Second, it could be fruitful to further investigate the lessons learned in Paper 4, both theoretically as well as empirically. Digital strategy is a new domain and currently under-researched in IS theory and management practice. We therefore join Bharadwaj et al. (2013) in calling for further research as the future of digital strategy is closer than most companies realize (Westerman et al. 2012; 2014).

Third, further research would also include: a validation of the CUBE framework presented in Paper 1, the Dynamic Alignment for Digital Strategy model in Paper 2, as well as the omnichannel framework in Paper 3 by applying the frameworks in other fashion companies and in different industries.

Fourth, as we noted in the limitations of this study, we recognize that the IS issues of the transformation process are closely interlinked with social media marketing issues. We examined these briefly in Paper 4 in regards to building the omnichannel community, but we suggest that this interrelationship of IS and marketing in omnichannel retailing should be further explored in the future.

Fifth, we suggest more research of the detailed subjects and aspects of omnichannel that we delimited from our study; e.g., customer relationship management (CRM) and supply chain development. CRM is an essential feature of omnichannel retailing, as it is an approach that encourages a consumer centric view and, as a system, helps join up a company's platforms and

channels to layer an aggregate analytic and communication tool (Verhoef et al. 2010). Aggregating a company's analytics and big data, analyzing it and acting upon the insights are often considered the next important game changer in retail. Companies mastering these domains have many strategic options, both on the customer and operational sides (Westerman et al. 2014).

Supply chain development is also a critical feature of omnichannel, as an effective and efficient supply chain, including logistics handling, is essential in ensuring that the right products are in the right channels at the right time. The desired goods must be delivered to the customers in the location where they wish for it to be delivered (e.g., home, at work, in-store, click and collect points, etc.) in a speedy and time allotted manner. Furthermore, the customer should also be able to return or exchange the goods at convenient locations, and future customers of the returned goods should receive them as completely fresh goods, even if it has been purchased and returned numerous times (e.g., return rates can in some countries be up to 70% of goods purchased online (see, e.g., Zalando.com/press-releases)).

8.4 Reflections and Epilogue

I am confident that this PhD journey has educated and prepared me, to a high extent, for my future role as Head of Global Marketing and Omnichannel at Hummel, which I will commence on 1st of March 2015. The collaboration with my co-authors and supervisors has provided me with a sharpened and strengthened view of Hummel, its strategy, resources and organization from both an IT and a business point of view. Questions that seemed small but were mind boggling, such as *"Were you and the digital department an IT resource or a business resource?"* and broader questions such as *"How you did you align all the countries?"* made me understand the bigger picture as well as the more granular mechanics of the transformation process. It continuously helped me reflect on my actual work. Hence, my collaborators have certainly provided me with a multifaceted understanding and therefore a stronger foundation for my future work and for the vision and strategy of Hummel's transformation going forward.

Being an action researcher has also taught me valuable lessons about the dual role of being a practitioner and a researcher, which I will bring with me to my future work. Even though I will go 'native' and be employed fulltime as a practitioner in Hummel, I have promised myself, and have agreed with the CEO and CMO, that I will still take some time occasionally to remove myself from the company settings to reflect on the work (systems, processes and organization), analyze the situation and give recommendations for, and enact, future interventions, which will bring Hummel further in its transformation toward omnichannel retailing.

The owner of Hummel, Christian Stadil⁵, while not being directly involved in the business operations, still wanted to discuss my future position with me before approving it. His main concern voiced in the discussion was not how I as Head of Global Marketing was going to portray the brand to the world, but rather if I would keep my focus on the digital strategy. He said: *"I do not want Hummel to be an analog brand. We need to make sure to keep up the progress and bring Hummel into the omnichannel era."*

In order to help bring Hummel into the omnichannel era, I will first and foremost continue to develop the organization toward the 2016 digital strategy, which we commenced in 2012, and keep refining it while looking toward 2020. I will especially focus my efforts on the following four points:

1. Setting the omnichannel direction and striving to keep on providing a strong transformative vision for Hummel. I will keep on building and nurturing a strong, forward-sighted and transfunctional team, which will help to lead the omnichannel transformation in Hummel.
2. Building momentum by encouraging engagement and interaction across the organization. I will direct the development and implementation of effective process flows and coordination mechanisms to break down silos, improve efficiency and ensure

⁵ Owner of Thornico Group, www.thornico.com, author and adjunct professor at Copenhagen Business School.

omnichannel efforts are moving in the right direction. Specifically, I will focus on Marketing, fostering an even closer collaboration with IT, Logistic, Finance, Sales and Design departments as omnichannel further impacts our cross-functional work; e.g., the B2B sales and customer service department needs to be much further integrated with B2C for omnichannel retailing.

3. Ensuring that we follow through by further implementing governance. We need to ensure that employees are engaged in the shared vision of creating one brand one voice (a strong centralized brand with control mechanisms to align business and IT strategies to create value) in order to help make the vision a reality.
4. Contribute to strengthening the IT-business relationship. Omnichannel transformation is about re-defining large parts of the business, and IT is essential for doing this. Specifically, I will contribute with my knowhow and capabilities to the forthcoming large development project of re-structuring and implementing Hummel's core ERP and PIM systems. Furthermore, as we place even more focus on gathering and using customer insight data to ensure better marketing, service and sales, I predict that this will eventually lead to accessing and implementing a major CRM system as well.

As a final note, I wish to express how grateful I am for having the opportunity to be part of the exciting omnichannel transformation era. My pursuit for combining the online and offline brand and shopping experience through multichannel retailing began in 2005 during my Bachelor studies and in practice through my work at Burberry in London. At that time, not many believed that multichannel retailing would be a reality. *"People just won't feel comfortable buying clothes they haven't tried on"* and *"The physical shopping experience just can't be transferred to the Internet"* were some of the skeptics' arguments I constantly heard at the university, while *"No, we won't compete with our existing distribution channel"* was the most common argument I met in practice. Nevertheless, ten years later, in 2015, we are witnessing that apparel and accessories is the largest category in online shopping, and that fashion brands not embracing online shopping and digital initiatives are being ignored by consumers. I am very excited about being part of the fashion industry and experiencing how

the industry is continuing to change the way it competes and integrates the online and offline brand, as well as the shopping experience during the next ten years – eventually totally transforming into omnichannel retailing.

REFERENCES

- Alexander, H. 2010. "Burberrys Conquest of Cyber Space," *Telegraph* 8/9/2010.
- Ansari, A., C. F. Mela, and S. A. Neslin. 2008, "Customer Channel Migration," *Journal of Marketing Research* (45:1), pp. 60-76.
- Avery, J., T. Steenburgh, J. Deighton, and M. Caravella. 2012, "Adding Bricks to Clicks: Predicting the Patterns of Cross-Channel Elasticities Over Time," *Journal of Marketing* (76:3), pp. 96-111.
- Avison, D. E., F. Lau, M. D. Myers, and P. A. Nielsen. 1999, "Action Research," *Communications of the ACM* (42:1), pp. 94-97.
- Babüroglu, O. N., and I. Ravn. 1992, "Normative Action Research," *Organization Studies* (13:1), pp. 19-34.
- Bang, Y., D. Lee, K. Han, M. Hwang, and J. Ahn. 2013, "Channel Capabilities, Product Characteristics, and the Impacts of Mobile Channel Introduction," *Journal of Management Information Systems* (30:2), pp. 101-126.
- Baskerville, R., and M. Myers. 2004, "Special Issue on Action Research in Information Systems: Making IS Research Relevant to Practice," *MIS Quarterly* (28:3), pp. 329-335.
- Baskerville, R., and A. T. Wood-Harper. 1998, "Diversity in Information Systems Action Research Methods," *European Journal of Information Systems* (7:2), pp. 90-107.
- Baskerville, R. L., and A. T. Wood-Harper. 1996, "A Critical Perspective on Action Research as a Method for Information Systems Research," *Journal of Information Technology* (11:3), pp. 235-246.
- Bendoly, E., J. D. Blocher, K. M. Bretthauer, S. Krishnan, and M. Venkataramanan. 2005, "Online/in-Store Integration and Customer Retention," *Journal of Service Research* (7:4), pp. 313.
- Berendt, B., S. Preibusch, and M. Teltzrow. 2008, "A Privacy-Protecting Business-Analytics Service for on-Line Transactions," *International Journal of Electronic Commerce* (12:3), pp. 115-150.
- Bharadwaj, A., O. A. El Sawy, P. A. Pavlou, and N. Venkatraman. 2013, "Digital Business Strategy: Toward a Next Generation of Insights," *MIS Quarterly* (37:2), pp. 471-482.
- Blum, H. F., and H. F. Blum. 1955. *Time's Arrow and Evolution*, Princeton University Press Princeton.

- Brynjolfsson, E., Y. J. Hu, and M. S. Rahman. 2013, "Competing in the Age of Omnichannel Retailing," *MIT Sloan Management Review* (54:4), pp. 23-29.
- Chan, Y. E., and B. H. Reich. 2007, "IT Alignment: What have we Learned?" *Journal of Information Technology* (22:4), pp. 297-315.
- Checkland, P. 1991, "From Framework through Experience to Learning: The Essential Nature of Action Research," *Information Systems Research: Contemporary Approaches and Emergent Traditions* pp. 397-403.
- . 1999, "Systems Thinking, Systems Practice: Includes a 30-Year Retrospective," Wiley, Chichester.
- Chiu, H. C., Y. C. Hsieh, J. Roan, K. J. Tseng, and J. K. Hsieh. 2010, "The Challenge for Multichannel Services: Cross-Channel Free-Riding Behavior," *Electronic Commerce Research and Applications*.
- Chung, C., S. C. Chatterjee, and S. Sengupta. 2012, "Manufacturers' Reliance on Channel Intermediaries: Value Drivers in the Presence of a Direct Web Channel," *Industrial Marketing Management* (41:1), pp. 40-53.
- Coghian, D. 2001, "Insider Action Research Projects," *Management Learning* (32:1), pp. 49-60.
- Deloitte. 2014. *The Omnichannel Opportunity. Unlocking the Power of the Connected Consumer*.
- Flyvbjerg, B. 2012, "Five Misunderstandings about Case Study Research, Corrected," *Qualitative Research: The Essential Guide to Theory and Practice*, London and New York: Routledge pp. 165-166.
- Forrester. 2014, "Consumer Desire Vs Retailer Capabilities: Minding the Omni-Channel Gap," (January).
- Gerow, J. E., J. B. Thatcher, and V. Grover. 2014, "Six Types of IT-Business Strategic Alignment: An Investigation of the Constructs and their Measurement," *European Journal of Information Systems* (20 May), pp. 1-27.
- Gregor, S. 2006, "The Nature of Theory in Information Systems," *MIS Quarterly* pp. 611-642.
- Hansen, R., and S. K. Sia. 2015, "Hummel's Digital Transformation Toward Omnichannel Retailing: Key Lessons Learned," *MIS Quarterly Executive* (June - forthcoming).
- Hansen, R., A. Yeow, and C. Soh. 2015, "Aligning with New Digital Strategy: A Dynamic Capabilities Approach," Under review at *Journal of Strategic Information Systems*.

- Henderson, J. C., and N. Venkatraman. 1993, "Strategic Alignment: Leveraging Information Technology for Transforming Organizations," *IBM Systems Journal* (32:1), pp. 4-16.
- Hodgkinson, S. L. 1996. *The Role of the Corporate IT Function in the Federal IT Organization*, Oxford University Press, Oxford, UK.
- Iversen, J. H., L. Mathiassen, and P. A. Nielsen. 2004, "Managing Risk in Software Process Improvement: An Action Research Approach," *MIS Quarterly* (28:3), pp. 395-433.
- Jepsen, L. O., L. Mathiassen, and P. A. NIELSEN. 1989, "Back to Thinking Mode: Diaries for the Management of Information Systems Development Projects," *Behaviour & Information Technology* (8:3), pp. 207-217.
- Jurisch, M. C., P. Wolf, and H. Krcmar. 2013, "Using the Case Survey Method for Synthesizing Case Study Evidence in Information Systems Research," *Proceedings of the Nineteenth Americas Conference on Information Systems*, Chicago, Illinois August 15-17.
- Kapferer, J. N. 2008. *The New Strategic Brand Management: Creating and Sustaining Brand Equity Long Term*, Kogan Page Ltd, London.
- Keller, K. L. 2010, "Brand Equity Management in a Multichannel, Multimedia Retail Environment," *Journal of Interactive Marketing* (24:2), 5, pp. 58-70.
- Kuruzovich, J., S. Viswanathan, R. Agarwal, S. Gosain, and S. Weitzman. 2008, "Marketspace Or Marketplace? Online Information Search and Channel Outcomes in Auto Retailing," *Information Systems Research* (19:2), pp. 182.
- Kvale, S., and S. Brinkmann. 2008. *Interviews: Learning the Craft of Qualitative Research Interviewing*, Sage Publications, Thousand Oaks.
- Kwon, W. S., and S. J. Lennon. 2009, "Reciprocal Effects between Multichannel Retailers' Offline and Online Brand Images," *Journal of Retailing* (85:3), pp. 376-390.
- L2. 2014. *Fashion 2014* <http://www.l2inc.com/research/fashion-2014>.
- Lindgren, R., O. Henfridsson, and U. Schultze. 2004, "Design Principles for Competence Management Systems: A Synthesis of an Action Research Study," *MIS Quarterly* (28:3, Special Issue on Action Research in Information Systems), September, pp. 435-472.
- Luftman, J., and R. Kempaiah. 2008, "Key Issues for IT Executives 2007," *MIS Quarterly Executive* (7:2), pp. 99-112.
- Luftman, J., H. S. Zadeh, B. Derksen, M. Santana, E. H. Rigoni, and Z. D. Huang. 2012, "Key Information Technology and Management Issues 2011–2012: An International Study," *Journal of Information Technology* (27:3), pp. 198-212.

- Makadok, R. 2011, "The Four Theories of Profit and their Joint Effects," *Journal of Management* (37:5), pp. 1316-1334.
- . 2010, "The Interaction Effect of Rivalry Restraint and Competitive Advantage on Profit: Why the Whole is Less than the Sum of the Parts," *Management Science* (56:2), pp. 356-372.
- Mathiassen, L. 2002, "Collaborative Practice Research," *Information Technology & People* (15:4), pp. 321-345.
- Mathiassen, L., and P. A. Nielsen. 2008, "Engaged Scholarship in IS Research," *Scandinavian Journal of Information Systems* (20:2), pp. 1-18.
- McKay, J., and P. Marshall. 2001, "The Dual Imperatives of Action Research," *Information Technology & People* (14:1), pp. 46-59.
- Mithas, S., A. Tafti, and W. Mitchell. 2013, "How a Firm's Competitive Environment and Digital Strategic Posture Influence Digital Business Strategy," *MIS Quarterly* (37:2), pp. 511-536.
- Myers, M. D., and D. Avison. 1997, "Qualitative Research in Information Systems," *Management Information Systems Quarterly* (21:2), pp. 241-242.
- Nielsen, P. 2007, "IS Action Research and its Criteria," *Information Systems Action Research* pp. 355-375.
- Nuttall, P. A. 1998. "Understanding 'Empowerment': A Study in a Manufacturing Company," *PhD Thesis, Henley Management College*.
- Pettigrew, A. M. 1990, "Longitudinal Field Research on Change: Theory and Practice," *Organization Science* (1:3), pp. 267-292.
- . 2001, "Management Research After Modernism," *British Journal of Management* (12:1), pp. 61-70.
- Prahalad, C. K., and G. Hamel. 1990, "The Core Competence of the Corporation," *Harvard Business Review* (68:3), pp. 79-91.
- Preston, D. S., and E. Karahanna. 2009, "Antecedents of IS Strategic Alignment: A Nomological Network," *Information Systems Research* (20:2), pp. 159-179.
- Queiroz, M., T. Coltman, R. Sharma, P. Tallon, and P. Reynolds. 2012. "Strategic IT Alignment: An Evaluation and Process-Level Reconceptualization of the Construct," *Academy of Management Annual Meeting: The Informal Economy* pp. 1-32.
- Rapoport, R. N. 1970, "Three Dilemmas in Action Research with Special Reference to the Tavistock Experience," *Human Relations* (23:6), pp. 499-513.

- Rayport, J. F., and B. J. Jaworski. 2003. *Introduction to E-Commerce*, McGraw-Hill Boston.
- Reynolds, P., and P. Yetton. 2015, "Aligning Business and IT Strategies in Multi-Business Organizations," *Journal of Information Technology* (forthcoming).
- Riggins, F. J. 2004, "A Multichannel Model of Separating Equilibrium in the Face of the Digital Divide," *Journal of Management Information Systems* (21:2), pp. 161-179.
- Riley, F. D. O., and C. Lacroix. 2003, "Luxury Branding on the Internet: Lost Opportunity Or Impossibility?" *Marketing Intelligence & Planning* (21:2), pp. 96-104.
- Rosenbloom, B. 2007, "Multi-Channel Strategy in Business-to-Business Markets: Prospects and Problems," *Industrial Marketing Management* (36:1), pp. 4-9.
- Rowley, J. 2009, "Online Branding Strategies of UK Fashion Retailers," *Internet Research* (19:3), pp. 348-369.
- Sambamurthy, V., A. Bharadwaj, and V. Grover. 2003, "Shaping Agility through Digital Options: Reconceptualizing the Role of Information Technology in Contemporary Firms," *MIS Quarterly* pp. 237-263.
- Sarker, S., S. Sarker, A. Sahaym, and N. Bjørn-Andersen. 2012, "Exploring Value Cocreation in Relationships between an ERP Vendor and its Partners: A Revelatory Case Study," *MIS Quarterly* (36:1), pp. 317-338.
- Schön, D. A. 1983. *The Reflective Practitioner: How Professionals Think in Action*, Basic books, New York.
- Seringhaus, F. H. R. 2005, "Selling Luxury Brands Online," *Journal of Internet Commerce* (14:4) pp. 5-34.
- Sharma, A., and A. Mehrotra. 2007, "Choosing an Optimal Channel Mix in Multichannel Environments," *Industrial Marketing Management* (36:1), 1, pp. 21-28.
- Siddiqui, N., A. O'Malley, J. C. McColl, and G. Birtwistle. 2003, "Retailer and Consumer Perceptions of Online Fashion Retailers: Web Site Design Issues," *Journal of Fashion Marketing and Management* (7:4), pp. 345-355.
- Sparks, L. 2003, "A Catalogue of Success? Argos and Catalogue Showroom Retailing," *The Service Industries Journal* (23:2), pp. 79-111.
- Susman, G. I., and R. D. Evered. 1978, "An Assessment of the Scientific Merits of Action Research," *Administrative Science Quarterly* pp. 582-603.

- Tallon, P. P. 2008, "A Process-Oriented Perspective on the Alignment of Information Technology and Business Strategy," *Journal of Management Information Systems* (24:3), pp. 227-268.
- Teece, D. J. 2007, "Explicating Dynamic Capabilities: The Nature and Microfoundations of (Sustainable) Enterprise Performance," *Strategic Management Journal* (28:13), pp. 1319-1350.
- Tuunainen, V. K., and M. Rossi. 2002, "eBusiness in Apparel Retailing Industry-Critical Issues," *ECIS 2002 Proceedings* pp. 136.
- Van Bruggen, G. H., K. D. Antia, S. D. Jap, W. J. Reinartz, and F. Pallas. 2010, "Managing Marketing Channel Multiplicity," *Journal of Service Research* (13:3), pp. 331.
- Van de Ven, A. 2007. *Engaged Scholarship: A Guide for Organizational and Social Research: A Guide for Organizational and Social Research*, Oxford University Press.
- Van de Ven, A., and P. Johnson. 2006, "Knowledge for Theory and Practice," *Academy of Management Review* (31:4), pp. 802-821.
- Venkatesan, R., V. Kumar, and N. Ravishanker. 2007, "Multichannel Shopping: Causes and Consequences," *Journal of Marketing* (71:2), pp. 114-132.
- Verhoef, P. C., R. Venkatesan, L. McAlister, E. C. Malthouse, M. Krafft, and S. Ganesan. 2010, "CRM in Data-Rich Multichannel Retailing Environments: A Review and Future Research Directions," *Journal of Interactive Marketing* (24:2), pp. 121-137.
- Wade, M. R., and S. Nevo. 2006, "Development and Validation of a Perceptual Instrument to Measure E-Commerce Performance," *International Journal of Electronic Commerce* (10:2), pp. 123-146.
- Webb, K. L. 2002, "Managing Channels of Distribution in the Age of Electronic Commerce," *Industrial Marketing Management* (31:2), pp. 95-102.
- Webb, K. L., and C. J. Lambe. 2007, "Internal Multi-Channel Conflict: An Exploratory Investigation and Conceptual Framework," *Industrial Marketing Management* (36:1), pp. 29-43.
- Webcredible. 2012. *Omni-Channel Report 2012* <http://www.webcredible.com/blog-reports/white-papers/omni-channel-report-2012.pdf>.
- Weber, R. 2003, "Editor's Comment: Theoretically Speaking," *MIS Quarterly* (27:3), pp. iii-xii.
- . 2012, "N for Info," *Journal of the Association for Information Systems* (13:1), pp. 1-30.

- Webster, J., and R. T. Watson. 2002, "Analyzing the Past to Prepare for the Future: Writing a Literature Review," *MIS Quarterly* (26:2), pp. xiii-xxiii.
- Westerman, G., M. Tannou, D. Bonnet, P. Ferraris, and A. McAfee. 2012, "The Digital Advantage: How Digital Leaders Outperform their Peers in Every Industry," *MIT Sloan Management Review Cambridge, USA* (November).
- Westerman, G., D. Bonnet, and A. McAfee. 2014. *Leading Digital: Turning Technology into Business Transformation*, Harvard Business Press.
- Williams, M. D., Y. K. Dwivedi, B. Lal, and A. Schwarz. 2009, "Contemporary Trends and Issues in IT Adoption and Diffusion Research," *Journal of Information Technology* (24:1), pp. 1-10.
- Woodard, C. J., N. Ramasubbu, F. T. Tschang, and V. Sambamurthy. 2013. "Design Capital and Design Moves: The Logic of Digital Business Strategy," *MIS Quarterly* (37:2), pp. 537-564.
- Yan, R. 2011, "Managing Channel Coordination in a Multi-Channel Manufacturer–retailer Supply Chain," *Industrial Marketing Management* (40:4), pp. 636-642.
- Yang, T. A., D. J. Kim, V. Dhalwani, and T. K. Vu. 2008. "The 8C Framework as a Reference Model for Collaborative Value Webs in the Context of Web 2.0," *Proceedings of the 41st Annual Hawaii International Conference on Systems Sciences, Hawaii, USA*, pp. 319-319.
- Yayla, A. A., and Q. Hu. 2012, "The Impact of IT-Business Strategic Alignment on Firm Performance in a Developing Country Setting: Exploring Moderating Roles of Environmental Uncertainty and Strategic Orientation," *European Journal of Information Systems* (21:4), pp. 373-387.
- Yin, R. K. 2003. *Applications of Case Study Research (Applied Social Research Methods)*, Sage Publications, Thousand Oaks.
- . 1989. *Case Study Research: Design and Methods (Applied Social Research Methods)*, Sage Publications, Thousand Oaks.
- Zhang, J., P. W. Farris, J. W. Irvin, T. Kushwaha, T. J. Steenburgh, and B. A. Weitz. 2010, "Crafting Integrated Multichannel Retailing Strategies," *Journal of Interactive Marketing* (24:2), pp. 168-180.

Research Paper 1

Hansen, R., and Bjorn-Andersen, N. 2013, "Cube assessment framework for B2C websites applied in a longitudinal study in the luxury fashion industry," *Journal of Theoretical and Applied Electronic Commerce Research*, (8:2), pp. 1-20.

This article is not part of this edition of the thesis but can be found here
<http://www.jtaer.com/portada.php?agno=2013&numero=2#>

--



Page 171-186 is therefor not in this edition



Co-author statement

Title of paper	Cube Assessment Framework for B2C Websites Applied in a Longitudinal Study in the Luxury Fashion Industry
Journal	Journal of Theoretical and Applied Electronic Commerce (JTAER)
Published	vol. 8 issue 2, August 2013, pp 1-20

1. Co-author (PhD student)	Rina Hansen
Contribution (%)	80%
2. Co-author	Niels Bjørn-Andersen
Contribution (%)	20%

1. Co-author (PhD student)	Rina Hansen			
I hereby declare that the above information is correct	Yes	<input checked="" type="checkbox"/>	No	
<div>24 Jan 2015</div> <div>Date</div> <div></div> <div>Signature</div>				
2. Co-author	Niels Bjørn-Andersen			
I hereby declare that the above information is correct	Yes	<input checked="" type="checkbox"/>	No	
<div>24 Jan 2015</div> <div>Date</div> <div></div> <div>Signature</div>				

Research Paper 2

Hansen, R., Yeow, A., and Soh, C. 2015, "Aligning with new Digital Strategy: a Dynamic Capabilities Approach" *Under review at Journal of Strategic Information Systems*.

ALIGNING WITH NEW DIGITAL STRATEGY: A DYNAMIC CAPABILITIES APPROACH

Abstract

Alignment of business and information technology (IT) strategies is an important and enduring theoretical challenge for the information systems discipline, as it has been found to be associated with business performance. Prior alignment research has typically looked at alignment between IT function and business strategies at the enterprise level, and has left open the question of how alignment of business and IT resources occur across multiple functional processes. To address this gap, we conduct a longitudinal analysis of a B2B company's journey to enact its B2C digital strategy using the dynamic capabilities lens. We develop, from our findings, a longitudinal model that shows the sequence of actions taken in the exercise of Sensing, Seizing and Transforming capabilities to develop IT and business resources that are aligned with the new digital strategy. The model reflects the dynamics of alignment in the iteration among evolving strategy, exercise of dynamic capabilities, and tensions. The creation of hybrid resources – which are a fusion of IT and business – appear to be critical because of the high integration requirements for digital strategy.

KEYWORDS: Dynamic Capabilities, Digital Strategy, Alignment, B2C ecommerce

INTRODUCTION

Companies today recognize the pervasiveness of data and IT across the enterprise. As a result, companies are increasingly turning to digital strategy for competitive advantage. Bhadrawaj et al. (2013, p.472) define digital strategy as “organizational strategy formulated and executed by leveraging digital resources to create differential value.” However, in order for companies to successfully implement this strategic shift, they need to be able to re-align their IT and business resource base.

Whilst there has been a strong stream of research looking at the issue of strategic alignment between IT and business, these studies have typically focused at the enterprise level and few studies have looked at the dynamics of alignment (Chan and Reich 2007). Furthermore, the dynamics of alignment are likely to be especially challenging because digital strategy is transfunctional (Bharadwaj et al. 2013), and thus, the alignment requires simultaneous development and reconfiguration of IT and business resources across multiple organization processes. As more organizations shift towards digital strategy, we need to better understand how organizational IT and business resources and processes are developed to align with a new digital strategy.

We use the dynamic capabilities approach to examine this issue, since this approach focuses on how companies develop new resources and routines in order to thrive in changing environments. We adapted Teece’s (2007) framework of Sensing, Seizing, and Transforming dynamic capabilities and made it more concrete by synthesizing it with four different modes of dynamic capabilities (leveraging, creating, accessing and releasing). We conducted a longitudinal study of a European sports fashion company that shifted from a pure B2B model to augmenting it with an Internet-based B2C digital strategy, over a four-year period.

Our study resulted in the development of a longitudinal model that shows the sequence of leveraging, creating, accessing and releasing actions taken in the exercise of Sensing, Seizing and Transforming capabilities to develop IT and business resources that are aligned with the new digital strategy. The creation of hybrid resources – which are a fusion of IT and business – appear to be critical because of the high integration requirements for digital strategy. The exercise of dynamic capabilities may also trigger tensions within the organization. Our findings also show that digital strategy may start off somewhat tentatively, and evolve and become more concrete over time. The model captures this aspect of alignment dynamics in the iteration among the evolving strategy, exercise of dynamic capabilities, and tensions.

In the following section, we present the relevant literature on IT alignment and dynamic capabilities. We then describe our methodology, and present our findings. We conclude with a discussion of the results and implications for research and practice.

THEORY

Aligning Resources to New Digital Strategies

The alignment of IT with business is considered to be important because alignment has been found to be associated with performance in general (Bergeron et al. 2004; Chan et al. 1997; Croteau and Bergeron 2001; Kearns and Sabherwal 2007; Oh and Pinsonneault 2007; Zahra and Covin 1993). Alignment has most often been conceptualized and studied as the alignment of IT and business strategies at the enterprise level. For example, Reich and Benbasat (1996) define alignment as “the degree to which the information technology mission, objectives, and plans support and are supported by the business mission, objectives, and plans” (p. 56). Over time, the concept of alignment has been refined to reflect the evolving complexities of organizations and pervasiveness and fusion of IT throughout organizational processes (El Sawy 2003).

One refinement has been the recognition that strategic alignment often does not occur only at the enterprise level. Some researchers have highlighted that there can be multiple strategies within an organization, for example, at the corporate and at the business unit level (Reynolds and Yetton 2015). Alignment therefore needs to be considered at both levels. Other researchers have argued for alignment at the process level, since strategy is implemented via a series of processes (Queiroz et al. 2012; Tallon 2008). Hence, business and IT alignment need not be equally strong across all areas of the organization, but only in those processes that are critical to the strategy. For example, a strategy of operational excellence would require IT alignment in the critical processes of supplier relations, production and operations, while a strategy of customer intimacy would require alignment in critical processes of customer relations, sales and marketing support.

That business strategy may not be monolithic within an organization, and that alignment occurs at various locations in an organization, is salient as organizations begin to embrace digital strategies (Mithas et al. 2013). Digital strategies may be positioned as a complement to existing business (and strategies), or potentially as new businesses that may compete with existing businesses and strategies. Recent definitions of digital strategy strongly emphasize the pervasiveness and embeddedness of IT throughout the organization (c.f., Bhadrawaj et al. (2013, p.472) digital strategy provided earlier). These note that digital strategy is distinguished from the traditional view in that it is inherently transfunctional, i.e., going beyond viewing IT as a function, recognizing its

pervasiveness in other functions such as operations, marketing, and encompassing both function and process strategies. Mithas et al. (2013, p.513) further note that digital business strategy implies a dynamic synchronization between business and IT to gain competitive advantage. They also imply that digital strategy is transfunctional and take the view that firms should consider IT as essential to the framing of overall business strategy, that is, a fusion of IT and business strategy, which is in contrast to the traditional view of IT as a “functional level strategy that must be aligned with the firm’s business strategy” (Bharadwaj et al. 2013, p.472).

The implementation of digital strategy has implications for the company’s resources and capabilities. The need to align IT and business resources to strategy have long been recognized as important, as strategy requires a set of aligned resources for its execution. Henderson and Venkatraman (1993), in their seminal strategic alignment model, define alignment not only as fit and integration between business and IT strategy, but also with business and IT infrastructure. Tallon (2008) further strengthens the argument for the value of strategy-resource alignment, by noting that the integration of IT and business processes can be causally ambiguous and hence the source of superior performance. Other researchers who specifically discuss digital strategy also note the importance of resources. For example, Mithas et al. (2013) assert that the company’s investment in IT resources is a critical decision in digital strategy, while Grover and Kohli (2013) note that digital strategies leverage a company’s ability to rapidly deploy systems on developmental platforms. We further argue that the transfunctional nature of digital strategy, together with the recent work on process level alignment (Queiroz et al. 2012; Tallon 2008) suggests a need for simultaneous alignment of specific business and IT resources across multiple functional processes within the company, such as logistics, marketing and finance.

How might this simultaneous alignment of IT and business resources across multiple processes be achieved? There is some work on the dynamics of alignment. For example, IT has been found to sometimes lag, and at other times lead business change (Burn 1996). Sabherwal et al.’s (2001) interesting study on the dynamics of alignment found a pattern of long periods of relatively stable, evolutionary change, which are punctuated by revolutionary change, usually triggered by a combination of environmental shifts, low performance, new leadership or changes in perception. The study was, however, focused on strategic and structural alignment, and not on the alignment of resources. Hence, while prior research on the dynamics of alignments are helpful to our understanding of the overall process of alignment, important questions remain to be answered with regard to the actions taken to develop and reconfigure specific resources (Karpovsky and Galliers 2015). To this end, one critical challenge, noted by Galliers (2004) is, given existing IT and

business resources and processes can be relatively fixed, how a company would develop new resources and processes to support changes in strategy. This challenge continues to be raised in recent work – for example, Reynolds and Yetton (2015) also note the role of path dependency (Ghemawat 1991), where the organization's past investments in IT resources and processes would constrain its future behavior. In addition, the transfunctional nature of digital strategy highlights another related challenge, which is to understand how resources are aligned, not only on an individual process basis but as a cluster of related processes that together enact the strategy (Tallon 2008).

To answer the question of how a company develops new resources in order to align with shifts in its strategy and in the face of existing resources aligned with prior strategy, we found the dynamic capabilities approach helpful. The dynamic capability approach attempts to understand how companies engage in renewal through changing its resources and routines in response to environmental changes (Dierickx and Cool 1989; Teece et al. 1997). Prior research has also suggested that dynamic capabilities play a critical role in the deployment of digital strategy (Courtney et al. 2012; Drnevich and Croson 2013; Reynolds and Yetton 2015).

Dynamic Capabilities

The dynamic capabilities approach argues that companies with the abilities to change their resources and routines, and, in turn, their products and services are better at surviving and thriving in changing environments (Eisenhardt and Martin 2000; Teece et al. 1997). Thus, we argue that this approach speaks directly to our main research question of how IT and business resources and processes are reconfigured to align with a new strategy. We draw on Helfat et al.'s (2009) definition, as it synthesizes the core related ideas across three of the more influential definitions in the dynamic capabilities literature (Eisenhardt and Martin 2000; Teece et al. 1997; Zollo and Winter 2002). Dynamic capability is “the capacity of an organization to purposefully create, extend, and modify its resource base” (Helfat et al. 2009).

A small set of studies in IT alignment have argued that organizations need to possess a set of alignment capabilities to enable them to fully take advantage of changes in strategies (Chan and Reich 2007; Gupta et al. 1997; Street 2006). Some of these alignment capabilities include environmental scanning and assessing, building stakeholder commitment, prioritizing of resources and experiments. We find that this set of alignment capabilities resonate with the notion of dynamic capability and how it was employed to support new strategies (Montealegre 2002; Wheeler 2002). For example, Daniel and Wilson (2003) studied five companies engaged in e-business

transformations and found that the following dynamic capabilities were critical in aligning the business with the new strategy: rapid strategizing and evaluation, developing commitment among key internal and external stakeholders, iterative development of value propositions and reconfiguration of processes, as well as ability to integrate systems, channels and strategies. The capabilities identified in these studies map closely with Teece's (2007) theoretical framework of dynamic capabilities. We draw on Teece's (2007; 2009) dynamic capabilities framework to understand the process of ongoing alignment in a digital strategy environment. Teece conceptualized three broad categories of dynamic capabilities to sustain competitiveness in a changing environment: Sensing capability, Seizing capability and Transforming capability. The dynamic capability of *Sensing* is very much a scanning, learning, and interpretive activity to discover and create new opportunities (Teece 2009). In IT research, it is critical for companies to be able to absorb new information, identify new technological opportunities, and to select and develop new strategic plans (Daniel and Wilson 2003; Montealegre 2002; Wheeler 2002). This capability is especially relevant in digital strategy given the explosion of data concerning consumers' behavior, companies' actions, and industry conditions (Bharadwaj et al. 2013; Mithas et al. 2013). Companies need the ability to interpret and make sense of the data to develop their strategies. To exercise this capability, Teece (2009) argues that companies must put in place processes to steer through uncertainty and gain insight. These processes involve gathering and filtering technological, market, and competitive information from both inside and outside the company, making sense of it and figuring out implications for action. However, as attention is a scarce resource, management must carefully allocate resources for search and discovery. The company's articulated strategy can become a filter so that attention is not diverted to every opportunity and threat that search reveals. The dynamic capability of *Seizing* follows naturally after a new (technological or market) opportunity is sensed (Teece 2007). A company needs to have the capability to execute changes in resources and routines after the opportunities and strategic plans have been identified. IT research points to the importance of leveraging, investing and co-opting internal and external IT and business resources while maintaining a degree of flexibility as the company learns-by-doing and explores the different strategic opportunities (Daniel and Wilson 2003; Montealegre 2002). Practically, this involves investments in new structures and processes for developing and commercializing new products or services. Teece (2007) argues that these investments should be balanced with investments in maintaining complementary competencies and assets. Digital technology has made this development process even more complex given the accelerated speed of

product launches for digital content, services, and products through multiple industry platforms (Bharadwaj et al. 2013; Rai et al. 2012).

The *Transforming* dynamic capability refers to the company's ability to orchestrate assets and corporate renewal (Teece 2007). This requires managers to continuously work on "asset alignment, co-alignment, realignment, and redeployment" (Teece 2007, p.1336). The transforming capability is more critical in the ongoing alignment process as it attempts to ensure that the entire company structures, resources, and processes are aligned with the changes enacted as part of the digital strategy. This may involve revamping of routines, restructuring of departments, managing co-specialized assets, and putting in place governance and knowledge development structures. The capability enables the firm to integrate the new business processes with existing businesses. IT studies explicitly point to the need to integrate the new IT assets and business opportunities (Daniel and Wilson 2003), as well as to establish commitment and trust (Montealegre 2002; Wheeler 2002).

From Teece's (2007; 2009) work, as well as dynamic capability research on e-business transformation (Daniel and Wilson 2003; Wheeler 2002), we have a framework that helps us to understand that resources and processes are created and aligned through exercising Sensing, Seizing and Transforming capabilities. However, when applied to our question of how IT and business resource reconfigurations are aligned with digital strategy, we find that the specific actions for creating and aligning resources in the exercise of each dynamic capability are not clear. Different studies refer to varying actions. For example, Daniel and Wilson (2003) observe that companies developing new capabilities often rely on the creation of cross-functional teams. They also note that companies require access to external knowledge and systems for resources that are not available within the company. Montealegre (2002) refers to the need for activities such as investing, leveraging and co-opting resources but does not elaborate specifically on how and what resources were reconfigured or renewed. As such, there is no consistent approach to understanding the set of actions that a company might take in creating and reconfiguring resources. Second, while Teece (2007) and some empirical studies (e.g., (Danneels 2008) have noted the presence of tensions and conflict, the studies that outline actions involved in exercising dynamic capabilities tend to assume that the process is relatively unproblematic. How the tensions interact with the exercise of dynamic capabilities and the emerging resource configuration is thus not well understood.

We argue that Teece's (2007) dynamic capability framework could be complemented with a set of concepts that map out *how* each dynamic capability is exercised in the ongoing alignment process for digital strategy. We drew on Danneels' (2011) empirical study of how dynamic capability

operates through four different modes - Leveraging, Creating, Accessing and Releasing – that were developed from Eisenhardt and Martin's (2000) seminal article.

Leveraging involves putting existing resources to new uses (Danneels 2002; Danneels 2007).

Leveraging existing resources requires that these are fungible (Teece 1982) —the degree to which resources are amenable to other applications. Examples of fungible resources include product brand, business models, configurable IT infrastructure, distribution access and manufacturing facilities. Each of these fungible resources could be applied to other products or strategies. In traditional strategy research, acts of leveraging include the extraction of additional value from under-utilized resources or using existing capability as a stepping-stone to build a new capability. The latter form of leveraging is especially apt for digital resources and digital strategy since many of the digital resources such as mobile networks, cloud computing, web services, etc. are being utilized to rapidly scale the scope of a company's products and services (Woodard et al. 2013). By adapting existing resources, especially digital resources, the leveraging mode explicitly helps align existing company resources with the new strategy. The transfunctional nature of digital strategy also suggests that leveraging of resources will need to occur in multiple functional processes.

Dynamic capability is also exercised through **creating** new resources and processes, which are combined to form a new capability (Danneels 2002; Danneels 2011), such as new technological capability (the ability of the company to make certain physical products) or customer/market capability (the ability of the company to serve a particular market or customer group). Examples of such resources and processes include R&D assets and activities (Danneels 2002), forming new alliances and relationships with external app developers (Bharadwaj et al. 2013) or product development routines that combine existing company resources to create new processes (Eisenhardt and Martin 2000). This mode is important in the ongoing alignment process since not all existing resources could be amenable to the new digital strategy. Further, the transfunctional nature of digital strategy suggests that resource creation is likely to occur not only at the enterprise level for enterprise-spanning resources, (e.g., IT infrastructure), but also specifically for a range of processes (e.g., logistics systems, sales systems).

Accessing is the use of external resources e.g., from vendors or partners (Eisenhardt and Martin 2000). Accessing changes a company's resource base by adding a resource that the company may not possess. Usually, firms access resources that are complementary to resources in the company (Danneels 2002; Danneels 2011). The accessing mode, like the creating mode, aids in the alignment process by supplementing areas where the existing resource base is lacking. In the digital domain, companies are increasingly accessing shared digital platforms like Salesforce.com, Amazon web

hosting services, or business community platforms like healthcare exchanges to supplement their digital resources (Markus and Loebbecke 2013). The relative novelty of digital strategies and hence the associated resources also mean that many companies may not have expertise internally, and hence accessing external resources is likely to be significant in aligning to digital strategy.

Releasing involves dropping existing resources, such as reducing the workforce or removing resource combinations that no longer provide competitive advantage as markets, strategies and users change (Eisenhardt and Martin 2000). Some of these resources may be redeployed for other uses or processes within the firms (Danneels 2011). This mode has important implication for alignment in that it may be necessary in dealing with path dependent constraints. Thus, in situations where certain existing resource configurations e.g., legacy systems, may not be optimal for a new digital strategy, the resource configurations may be altered by releasing these systems from the company's network so as to realign the resource base with the strategy.

The resultant framework combines the three types of dynamic capabilities (from Teece's work) and the four modes of exercising dynamic capability (Danneels 2011; Eisenhardt and Martin 2000).

This framework has been applied in an in depth longitudinal case study of Hummel—a B2B supplier of sports fashion goods—who was able to significantly realign its resources and implement a new B2C digital strategy. The framework enabled us to identify, analyze and understand the actions taken as well as the interactions among strategy, resources and tensions, during the four year period of developing and reconfiguring resources for the new B2C digital strategy.

METHODS

In order to understand more deeply how resources are created and reconfigured to align to a new digital strategy, we decided to use a revelatory case study approach (Sarker et al. 2012; Yin 1989) in the form of a detailed, longitudinal case study. This approach allowed for tracing the development of resources in its natural settings over time, rather than through frequencies or incidences (Yin 2003). It furthermore would allow for a thick and rich account in theory building (Benbasat et al. 1987).

Case Selection

We chose Hummel because we were able to study closely its shift to a new digital strategy and its accommodating resource reconfiguration from 2010 to 2014. Hummel was founded in 1923 in Hamburg, Germany, but is now based in Aarhus, Denmark. Hummel operates in the sport and lifestyle apparel, footwear and accessories market, with an annual turnover of US\$240 million, and

is one of the fastest growing sportswear brands in the industry in recent years. Traditionally, all of Hummel's sales have been B2B through distributors, agents and licensed partners in over 40 countries. Hummel's largest markets are Denmark, Germany and Japan.

In 2010, Hummel recognized that to compete against larger sporting and lifestyle brands such as Adidas and Nike, it had to enter into B2C ecommerce. The CEO therefore initiated a digital strategy, which included the development of B2C ecommerce. IT was essential to the framing of the new business strategy, and would require leveraging existing back-end IT systems and development of new B2C facing IT systems. The strategy would also require leveraging existing business resources, such as marketing images, product text, logistic and finance processes, and new business resources, such as B2C ecommerce governance and processes. The digital strategy was as such a fusion of IT and business strategy.

However, as a traditional B2B company, Hummel had neither experience nor capabilities in the B2C arena. The company therefore embarked on a series of actions to develop resources to enable the shift to B2C. In 2012, Hummel carefully piloted B2C ecommerce in a limited way in Denmark and Germany; in 2013, after 90 years of operating an exclusively B2B business, the company rolled out full B2C ecommerce in Germany. In 2014 the company rolled out B2C ecommerce to other countries.

Data Collection

The data collection commenced in August 2010 and concluded in December 2014. We used multiple sources of data, including interviews, documents and observations. We were able to obtain in-depth access to Hummel's resource reconfiguration as one of the co-authors was involved in the strategy formulation and the resource development.

At the strategic level, 42 interviews were conducted with top management (CEO, Chief Marketing Officer, Chief Sales Officer and company owner). The interviews were in-depth, semi-structured and open-ended. Key questions asked included how they each viewed the development of IT and business resources to align with new digital strategy in their respective roles. The interviews were recorded, transcribed and analyzed.

Further, another 116 interviews with Hummel internal employees and external partners were conducted. The interviewees were predominantly departmental managers in the various functions involved, but all levels of the company were represented in the interviews. Interviews were between 30 minutes and two hours in length, were nearly all tape-recorded, and extensive notes were made during the interviews. Interviews with individuals focused on how the individuals or departments

were involved in developing the B2C ecommerce. There were also cross-departmental group interviews (e.g., steering and project groups) that focused on how the company as a whole could build B2C ecommerce to align with the new business strategy. Table 1 below summarizes the interviews, which are categorized chronologically in the table horizontally by Sensing, Seizing and Transforming, and vertically by internal department or external partner with the number of interviews indicated accordingly.

Table 1: Interviews

	Sensing⁶ Aug2010-Dec2010	Seizing Jan2011-Mar2012	Transforming Apr2012-Dec2014
Strategic Management			
CEO	1	6	6
CMO	1	7	4
CSO	2	3	3
Owner	1	1	1
Board	1	1	
Senior Management Group		4	
<i>Subtotal = 42</i>	<i>6</i>	<i>22</i>	<i>14</i>
Functional Departments			
IT	1	3	1
Marketing	2	6	1
Sales		2	
Finance	1		
Logistics	1	3	
Export	1	7	
Design	2		
Digital		14	
<i>Subtotal = 45</i>	<i>8</i>	<i>35</i>	<i>2</i>
Cross Functional			
Project groups incl. vendor		14	
Steering Group		3	
Hummel country partners	1	19	4
<i>Subtotal = 41</i>	<i>1</i>	<i>36</i>	<i>4</i>
External			
Technology partners	1	3	
Industry contacts	1	22	3
<i>Subtotal = 30</i>	<i>2</i>	<i>25</i>	<i>3</i>
Total = 158	17	118	23

We reviewed a wide range of documents, including company documents (e.g., Brand book, country contracts, 2016 strategy and plans, yearly departmental plans, etc.), presentation slides for the B2C proposal and updates to management, archives (e.g., historical marketing campaigns, website contracts, etc.), emails (e.g., between owner and management group, between management group and the digital team, etc.), meeting minutes (of meetings with different Hummel countries, management meetings, and marketing meetings).

⁶ Our data collection began in August 2010. However, the Sensing capability actually began in early 2010.

Data Analysis

We first wrote up the case chronologically, describing the key challenges, actions and milestones. This was presented to senior management multiple times during the four years and was more formally validated in semi-structured interviews in 2014, thus verifying the accuracy of data and our interpretation of it (Mason 1996).

We then categorized the case study data according to Teece's (2009) Sensing, Seizing and Transforming dynamic capabilities. As Teece (2009) conceptualized these capabilities as occurring sequentially over time, our first iteration between theory and data was to identify the time periods during which each dynamic capability was primary, and the broad set of associated activities.

In our study, we observed that Hummel began exercising the *Sensing capability* when the Hummel CEO began scanning information on the subject of digital strategy and interpreting, sensing and shaping this new opportunity for the company. This set of activities culminated in a digital strategy for B2C ecommerce. Once the broad B2C strategy had been outlined, we observed Hummel exercising the *Seizing capability* by addressing major IT and business resource development decisions, i.e., whether to handle ecommerce in-house or to outsource it to a third party, ecommerce company. This then culminated in the launch of the global website with pilot B2C ecommerce. We identified that Hummel began to exercise the *Transforming capability* when it simultaneously developed and integrated the IT and business resources for a pilot launch of B2C ecommerce to full ecommerce, extended the B2C site to other countries and added enhancements such as mobile functionality.

After this initial identification of the broad set of activities for each dynamic capability in the creation and implementation of Hummel's digital strategy, we analyzed the actions within each dynamic capability in terms of the four modes (Danneels 2002; 2007; 2011). We coded actions that put existing resources to new use as *Leveraging* mode. In our study, this was exemplified in the following: extending the existing ERP system for B2C ecommerce use, reconfiguring existing marketing image creation processes, and adapting logistics warehouse systems and processes. We coded actions that developed new resources for the new business opportunity as *Creating* mode. Examples included Hummel creating the new role of Head of Digital, a new Digital department, and new governance procedures for B2C ecommerce. Actions related to using external resources from a vendor or by alliances were coded as *Accessing* mode. An example was Hummel accessing external resources from the ecommerce system vendor for its B2C website and ecommerce system, the content management system, and its payment systems. We coded actions that involved dropping existing resources and routines as *Releasing* mode; for example, Hummel's redirection of

traffic from its existing HQ website after the new global website was launched. Tables 2 to 4 summarize our coding of the four modes for the Sensing, Seizing and Transforming capabilities.

As we coded the modes, it became clear that there were organizational challenges in each period that shaped the way the modes were exercised, the emergent strategy development, and the resultant resources and capabilities. For example, one tension that emerged early was the Sales department's concern with cannibalization of their B2B sales and effect on relationships with distributors. We iterated with theory and decided to code these challenges as "tension" (Danneels 2011; Teece 2007).

Finally, given that the IT literature has traditionally identified IT and business resources, we analyzed the resources that were being adapted or created through the exercise of each dynamic capability IT or business resource. Examples of IT resources include IT systems, IT department employees and skills, IT processes. Business resources included personnel, processes, equipment and facilities in departments such as Service center, Logistics and Marketing. In doing so, we found a number of resources, such as the Digital department employees and roles, where business and IT were so fused, that we could not classify them as either business or IT resources. We therefore coded them as hybrid resources.

RESULTS

Existing Business Strategy

Hummel had been operating as a sports fashion B2B supplier since its inception in 1923. Its corporate business strategy was fully focused on developing products to sell via large sport retail chains and sport specialists. To support this strategy Hummel had developed business resources and IT resources that enabled it to be competitive in this particular market. The business resources included a distinctive and well-known design, good manufacturing partnerships, and logistics, finance, marketing, sales and service tuned to its B2B customers, which ensured that the company delivered quality products at the right time.

The IT resources that supported the business strategy included an ERP system (Microsoft Dynamics Navision or "NAV") and a well-established IT department that functioned as a support mechanism for the ERP system. The IT Manager had been with Hummel for many years and was responsible for implementing the ERP system back in 1998.

However, in 2010, Hummel decided to establish a direct contact to the end-consumer via digital channels, and thereby change its corporate business strategy to include digital strategy for business-to-consumer (B2C). This was a new strategic direction that included developing digital

initiatives to create a differential value for the company. As described in the next section, the new strategy emerged from the CEO sensing the need for Hummel to include a digital B2C business. This was an area, which Hummel had not touched on before. Hence, the company did not possess any knowhow, processes or capabilities to steer in this new direction. It needed to reconfigure and develop resources to align with the new digital business strategy.

But how could an entrenched B2B company move into B2C? Below, we explicate how Hummel developed its B2C ecommerce business resources and IT resources to align with the new corporate digital strategy – and specifically how these evolved temporally together with the strategy through the Sensing, Seizing and Transforming capabilities.

Sensing Capability: Jan 2010 - Dec 2010

For some time, the CEO had been scanning information on the subject of B2C ecommerce in order to make sense of and shape this new opportunity, but the entire company still needed to learn more about the new business opportunity before they were able to interpret what it meant for Hummel. The CEO recalled that ecommerce had been mentioned informally at Board meetings in 2009 for the first time, *“not as a strategic element, more like, ‘we also need to be in on it.’”* He further explained that there were no existing B2C or digital knowhow, skills or resources within the company:

“The only thing I knew was that this thing [digital] was something we needed to do something about. Internally in the company, including myself, we had no such knowledge at all as to what the world or market would bring in the next three or four years [in terms of digital]. So we needed something; we needed capacity, brain and power within this area. So that was actually the only knowledge I really had.” (Hummel CEO)

The Chief Marketing Officer (CMO) similarly explained the reason for changing the business strategy as a sense of a new dynamic in the market:

“The reason was first and foremost, that we in general wanted to strengthen our digital capability but also competence. We knew that it was an area that Hummel did not possess any significant skills within so we saw the possibility to strengthen our profile. Another reason was that I thought we might achieve some competitive advantage at some point. I didn’t understand to what extent, where and when, to be quite honest.” (Hummel CMO)

In the beginning of 2010, the CEO met with an experienced ecommerce executive to explore how Hummel could benefit from taking advantage of the new digital channels for sales and marketing purposes. Following numerous discussions and deliberations, the CEO created a new position, Head of Digital, with the responsibility for setting up social media and B2C ecommerce capabilities within the company. The CEO then began to learn about new digital opportunities and evaluated the possibilities through conversations with the Head of Digital and the departments

involved in potential digital projects, as well as through internal and external research and insights gathered by the Head of Digital. He noted *“2010 was the year where I and the Board of Directors decided to have a more strategic focus on the web and the possibilities it gave.”*

The new Head of Digital was seen as both a business resource and an IT resource. As a business resource she should work directly with sales and marketing related operations and work in close relationship with logistics, finance and IT to enable and operate digital projects like social media and ecommerce. As an IT resource she was expected to have extensive knowhow about IT applications, architecture and infrastructure. She was as such a hybrid – a fusion between business and IT, which could link this new corporate business strategy of going digital to the existing resources in the company. In terms of IT infrastructure, she should make sure that the new digital systems would be carefully built around the existing IT systems, so that they were complementing each other.

The first task for the Head of Digital was to gradually take stock of the current business and IT resources and evaluate how these were applicable for B2C ecommerce. This included initiating and building individual relationships with all the departments in the company, introducing them to ecommerce and what it could mean to their existing functions and processes. Most employees involved had quite a strong reaction to this, as it would mean extra workload on top of their already stressed jobs. In addition, B2C ecommerce was also unknown territory for the employees, and they questioned not only their own competencies, but also the business consequences for the company. For example, the Logistics Manager stated, *“but we are a B2B company!”* Although there was a general sense of confusion – as no one had been given any formal directive about the new B2C business strategy– some departments began to have an initial understanding of the project through the informal conversations exploring the utilization of the existing B2B systems and processes for B2C ecommerce.

The IT department started to share their knowhow about the creation and processes of product data, the structure of data in the ERP system and the integration possibilities. They contributed knowhow about possible solutions for specific B2C ecommerce system challenges. For example, Hummel’s existing ERP system had been utilized solely for B2B since 1998. However, in order to build B2C ecommerce, Hummel had to figure out how to use the existing data and integrate it with the new B2C ecommerce frontend system. This was not straightforward, as the IT Manager did not have any B2C knowledge and was also very protective of his system. He did not want B2C customer data in the ERP system, as it would not be able to handle the volume, and he

did not want B2C product data in the ERP system, as it could not handle all the different attributes (e.g., pictures, videos, sales descriptions, size guides, etc.), and so on.

The Logistics and Finance department similarly started to share their knowhow during the informal discussions, and contributed to possible solutions for specific B2C ecommerce challenges. For example, Logistics already had a day-to-day service setup with single package delivery for B2B customers that conceivably could be reconfigured for B2C use. It would need different packaging and handling, including a different B2C labeling, invoicing and payment structure and returns process, but it seemed feasible at that point.

There were, however, some managers and departments who were strongly opposed to introducing B2C ecommerce. The process of leveraging the existing B2B resources for B2C created tensions, due to the lack of alignment between the new business strategy and the existing resources. In particular, the Chief Sales Officer (CSO) disapproved of the project, saying that if it was decided to launch B2C ecommerce, he would leave:

“The dealers in Denmark would be really pissed off. Even if they get a cut of the sale. I have said that if we do open a webshop in Denmark it will be without me.” (Hummel CSO)

The CSO’s opinion shaped his team’s attitude towards B2C ecommerce and this overall tension influenced the emerging strategy and consequent actions. For example, the nascent B2C strategic direction was developed with attention to how it would be positioned relative to the existing B2B business. The ecommerce sales strategy was carefully designed to avoid cannibalization of the existing wholesale accounts by positioning the B2C website as a support tool, and not as a sales tool (e.g., not offering product categories that were widely distributed in the B2B channels, not offering discounts and not providing free shipping).

Organization structure-wise, it also meant that the ecommerce project was placed under Marketing and hence missed the knowledge sharing, involvement and commitment from the Sales and Customer Service department. However, by accepting that the project was limited by these factors, the focus of the ecommerce project shifted to developing the systems and IT infrastructure backend, and the B2C website as a product support tool frontend. Inherently, there were no sales or commercial KPIs in the initial ecommerce strategy.

Following the initial evaluation, the Head of Digital presented the ecommerce strategy to the board. The B2C strategy had a “non-cannibalizing” position relative to the existing B2B business. The strategy included a five-year plan for roll out, budget for building the required IT systems, and for hiring of people needed for the ecommerce project. The Board approved the

strategic plan. With the Board's commitment, strategy and budget, as well as dedicated human capital, Hummel began to exercise the Seizing capability.

Table 2. Sensing Dynamic Capability: Leveraging, Creating, Accessing and Releasing Resources

	IT Resources	Business Resources
Leveraging	IT department knowhow: <ul style="list-style-type: none"> - Initiate relationship with IT department - Informally evaluate existing IT knowhow and fungibility - Explore IT department's B2B knowhow for B2C utilization ERP, warehouse and finance systems: <ul style="list-style-type: none"> - Informally evaluate existing B2B systems and their fungibility for B2C utilization 	Logistics Dept. & Warehousing, Finance Dept, Sales and Customer services, Marketing Dept: <ul style="list-style-type: none"> - Initiate relationships - Informally evaluate existing knowhow and processes and their fungibility
Creating	Hybrid Resources: <ul style="list-style-type: none"> - Hire a Head of Digital with knowledge of both marketing, sales and IT - Commence development of new digital expertise in the company - B2C ecommerce strategy, budget and roll out plan 	
Accessing	-	-
Releasing	-	-
New and Reconfigured Resources	<ul style="list-style-type: none"> - Head of Digital position - Digital expertise - B2C ecommerce strategy 	

Table 2 summarizes the existing B2B business resources and B2B IT resources and how they were purposefully extended, created or modified via the four modes into new B2C business resources and B2C IT resources in order to align with the new digital strategy. In exercising the Sensing capability, Hummel developed a Head of Digital position, an initial B2C ecommerce strategy and had commenced development of digital expertise within the company. No IT resources or business resources had yet been developed for B2C use, but relationships were initiated and the Head of Digital had informally evaluated the existing IT and business knowhow, set-up and fungibility for B2C use.

Seizing Capabilities: Jan 2011 – Mar 2012

Once the Board approved the broad five-year B2C ecommerce plan and budget, the development of resources to enable the digital strategy became more focused. One of the major development decisions that had to be made next, was whether to handle ecommerce in-house or to outsource it to a professional ecommerce company. This decision would shape the second round of the digital strategy refinement.

Given the company's lack of experience and resources for B2C ecommerce, outsourcing was seriously considered. An out-sourced ecommerce solution (third-party platform) would require

Hummel to hire an ecommerce company to manage its ecommerce operations - from purchasing and fulfillment to website management and customer service. The ecommerce shop would be treated as a normal individual store, for which Hummel would allocate an assortment and ship to the ecommerce company's warehouse. The ecommerce company would then ship the products directly to the end-consumer when they purchased from the webshop. The ecommerce company would also ensure traffic flow to the website, and would service all customer emails and phone calls. Hummel would not have any direct contact with the end-consumer. This solution had a shared revenue model with a minimum monthly payment plus payment for services provided by the ecommerce company. Choosing this option would mean that Hummel did not have to invest in building internal B2C ecommerce capabilities, but would treat the ecommerce business as a normal B2B account.

An in-house ecommerce solution (owned platform) would require Hummel to invest in new B2C ecommerce systems and in establishing a Digital department internally at the company. The entire company also had to be educated in B2C ecommerce, and many departments such as Logistics, Finance, Sales, Customer Service and Export would have additional responsibilities on top of their already busy work schedules. However, an owned platform would result in having full control of the new business, i.e., when and where to roll out ecommerce (control of timing and geography), which assortment (control of product mix), and which service levels and branding message (control of branding and governance). This solution would give full control of the brand online, and allow for proactively managing potential channel conflicts.

Extensive discussions between the Head of Digital and Hummel's management led to the realization that the outsourced solution would not align well with the non-cannibalizing position of Hummel's B2C strategy. Also, if Hummel did not launch ecommerce in Denmark, the earnings would be too low for the shared revenue model of the outsourced solution. More importantly, it was paramount for Hummel to have full control of the brand across all online sales and communication channels globally in order to manage the potential channel conflict and to create an aligned global brand. The CEO stated:

"The online sales are not my priority now. Businesswise, it does not matter if I turnover one million, five or ten millions. That is not my worry. But if I don't get to control the brand and the sales distribution online, that would be a worry." (Hummel CEO)

Hence, this tension between building B2C sales volumes versus carefully controlling the B2C sales to protect the B2B business and obtain brand control led to choosing the in-house solution. This decision further shaped the digital strategy and helped align resources with the "non-cannibalizing position". B2C ecommerce was treated as a digital strategy, as opposed to an IT

strategy, as the strategy involved not just systems, but depended heavily on business processes and resources in Logistics, Finance, Marketing and Sales.

To support the non-cannibalizing, in-house digital B2C strategy, both business and IT resources had to be strengthened. Hummel decided to create a Digital department within the company, as a separate function, which was expected to bridge the business processes (sales, marketing, logistics, finance, etc.) and backend IT as well as managing all digital B2C initiatives including external IT system vendor relations and integrations. The Digital department was therefore treated as a hybrid resource. A specific position, an Ecommerce Coordinator, was hired to coordinate the projects related to internal and external IT infrastructure, data and integration. The Ecommerce Coordinator would also write standard operating procedures (SoPs) in order to formalize the new processes within Hummel to ensure that all people involved in ecommerce would work in a standardized manner. A Digital Communicator was also hired to develop and structure digital communication across all channels, as well as orchestrate and support all Hummel countries and partners in communicating and interacting via digital platforms in an aligned and coherent manner.

The Digital department was critical in reconfiguring and developing new IT resources. They specified the requirements for a B2C ecommerce system and chose a system vendor that could develop a custom solution to fit Hummel's unique needs. They managed the vendor relationship closely and collaborated with the vendor and the IT department in defining the system infrastructure and product data structure for the B2C frontend as well as the various integrations. This required quite a large "data wash" - cleaning up the product data and establishing a new structure for future product data creation. The new data structure was dependent on both IT and business resources. For example, it required that all product designers standardize the creation of new product attributes in the ERP system, that marketing coordinators create new images for the digital media, and that the systems handle the larger amount of new data. The different business and IT processes had to work closely together, as the resulting product data would be directly exported to the B2C website, making all product attributes and marketing images in the back-end systems visible to the end-consumer visiting the B2C website. If there were errors in the data, it would be displayed directly to the end-consumer, which could hurt the brand image. The process of cleaning up and structuring the data creation in the ERP system resulted in Hummel having one central system for creation and maintenance of data, which could be exported into numerous systems going forward. It also resulted in structured data, which could be aggregated and

monitored, so that digital initiatives (e.g. website activity, ecommerce sales, digital marketing campaigns, etc.) could be measured real-time.

Business resources were simultaneously reconfigured to support the evolving B2C strategy. A steering group and cross-departmental project groups were created to launch the new business. The steering group consisted of the CEO, CMO, CFO, and Head of Digital, while all departments were represented across eight project groups. The project groups were setup to solve different challenges e.g., the Logistic project group, which was concerned with developing pick, pack, shipping and return handling for B2C, consisted of employees from the Logistic department, Finance department, IT department, and Digital department. Furthermore, existing processes had to be reconfigured. For example, Marketing and Creative processes were restructured to cater for B2C requirements (e.g., new photography, packshot⁷ and video set-up, revised catalogue set-up, revised campaign set-up, etc.). It was essential to include all departments across the project groups, as the ecommerce site not only depended on but also impacted all departments once it was launched. Working together meant that expertise was shared and solutions were found by incorporating different points of views.

The departments who felt threatened by the new project, e.g., Sales and Customer Service, did not contribute much, and their work processes were therefore not fully reconfigured or optimized for B2C ecommerce. Furthermore, the consistent tension between the existing B2B sales channel and the new B2C sales channel, which was most prominent in the Danish home market, resulted in launching just three products for sale in Denmark, while a fuller range was launched in Germany.

New business processes for B2C included governance (e.g., a Digital Manual, which stated guidelines and directives for areas related to ecommerce on Hummel's own platform and external platforms), SoPs for data handling, payment flows, B2C customer service, etc. as well as structures, routines and 24/7 systems service for ecommerce. All these, together with the website and ecommerce system (built by the IT vendor) and the integrations with the existing ERP system formed the foundation of the website. It was through the tight fusion of internal and external business and IT resources that collectively made the initial B2C digital business possible. Because of this interplay, it became possible to show campaigns, real-time product data, stock levels and prices from the existing ERP system on the new frontend B2C website and ship products to the end-consumer. The global brand website with pilot ecommerce in Denmark and Germany were then launched.

⁷ A packshot is a photograph of a product (often on a mannequin), which clearly shows the attributes of the product.

Table 3. Seizing Dynamic Capability: Leveraging, Creating, Accessing and Releasing Resources

	IT Resources	Business Resources
Leveraging	<p>IT department knowhow:</p> <ul style="list-style-type: none"> - Establish work and steering group with IT department involvement - Use IT department's B2B functions and processes for building integrations to B2C systems <p>B2B ERP system:</p> <ul style="list-style-type: none"> - Describe existing system infrastructure and product data - Involve vendor to help with data-wash and integrations - Hand over project to responsible job functions (Ecommerce Coordinator) – formalize routines - Utilize ERP system for B2C ecommerce <p>Logistics and Finance systems:</p> <ul style="list-style-type: none"> - Extend B2B logistics and finance IT systems and integrations for B2C use 	<p>Logistics department & warehousing, Finance department, Sales and Customer services, Marketing department:</p> <ul style="list-style-type: none"> - Establish work and steering group with Logistics, Finance, Sales, and Marketing department involvement - Extend business departments' functions and processes for B2C use - Extend warehouse, Service Centre and systems for B2C use - Extend product images and marketing material for B2C use <p>Hummel Brand:</p> <ul style="list-style-type: none"> - Utilize brand awareness for traffic to the website - Utilize brand desire for ecommerce sales
Creating	<p>Hybrid Resources:</p> <ul style="list-style-type: none"> - Set up a Digital Department - Hire two additional employees: an Ecommerce Coordinator and a Digital Communicator - Launch global website, with governance processes, SoPs, and structures for ecommerce - Launch ecommerce as a pilot to test B2B and market reaction 	
Accessing	<p>Content Management System:</p> <ul style="list-style-type: none"> - Decide on building an aligned global platform instead of having multiple local websites - Select CMS system and vendor - Use vendor's CMS system and knowhow - Test and refine <p>Ecommerce system:</p> <ul style="list-style-type: none"> - Decide on having ecommerce in-house - Select ecommerce system and vendor - Use vendor's ecommerce system and vendor's developers in order to customize system - Test and refine - Launch ecommerce system <p>Payment system:</p> <ul style="list-style-type: none"> - Select B2C ecommerce payment system - Integrate payment system with ecommerce system and ERP system - Test and refine - Launch payment system with ecommerce system <p>IT & Digital Knowhow:</p> <ul style="list-style-type: none"> - Use an external digital consultant from the ecommerce vendor 2 days a week in order to access digital knowhow and innovation skills - Use the digital consultant's knowledge for bridging between in-house IT and ecommerce vendor 	
Releasing	Local HQ website	
New and Reconfigured Resources	<ul style="list-style-type: none"> - Digital department - Digital employees - Governance processes, SoPs, and structures for ecommerce - Global website with CMS, ecommerce and payment systems. 	

	<ul style="list-style-type: none"> - Internal and external IT knowhow for B2C use - ERP system for B2C use - Logistics and Finance systems for B2C use 	<ul style="list-style-type: none"> - Logistics & warehousing, Finance, Sales and Customer services, Marketing departments' functions and processes for B2C use - Hummel brand for B2C use
--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Through the exercise of the Seizing capability, all departments including Sales' existing B2B systems and work processes included a B2C element, and with the launch of the new global website with pilot B2C ecommerce, Hummel had developed significant new B2C IT resources and business resources in order to align with the digital strategy (see Table 3). Nevertheless, the CEO recognized that launching B2C ecommerce, and having multiple sales channels, was just the beginning of the new digital strategy:

“Going multichannel has been the biggest eye-opener for me. I never realized how multifaceted the digital environment was. It's really important having a total picture of our online situation – what we are facing, where we are focusing our efforts, and why.” (Hummel CEO)

Transforming Capabilities: Apr 2012 – Dec 2014

Having built the foundational resources for B2C initiatives and with the launch of the B2C ecommerce pilot in Germany, Hummel began to expand the footprint of its B2C ecommerce both in terms of functional and geographic scope. The German B2C ecommerce site was expanded to include the full assortment of products. The global platform was also rolled out further with local websites for several key countries. In doing so, Hummel strengthened its brand consistency as well as brand control across countries.

The roll out of full product assortment in Germany did not involve any further development to the ERP system or ecommerce systems, as they were built to handle scalable ecommerce from day one. Rather, it was a matter of ticking off all current products for sale in the ERP system resulting in the front-end ecommerce system automatically changing the “Storefinder” button (which was next to all products that could not be bought on the website - helping visitors to find the product in a local store) into a “Buy” button on the website.

Following the launch of full ecommerce in Germany, Hummel began, over the next year and a half, to leverage the new B2C resource configurations to roll out further local country websites (France, Spain, Turkey and UK) on the global B2C website. The main purpose of grouping all countries on one platform was mainly to ensure a coherent brand experience across local websites, and to make Hummel products globally available via ecommerce in 2016. However, while rolling out the country sites, it became necessary to further customize the system to fit the different countries' needs; e.g., France and Turkey, two of Hummel's focal countries, needed a facility to upload their own locally produced Hummel products. The ecommerce system was

extended so that they could gain access to their specific part of the backend to upload their own products. At the frontend, all Hummel products would be showcased side by side as one aligned global brand.

Hummel continued to refine and add to the system features in the ecommerce setup so that it would be ready for the large roll out in 2016. One of the resources that could be further leveraged was the existing ERP system and its integration potential. The data from the ERP system could now be transferred every minute instead of once every hour, as the IT department had become familiar with the ecommerce system, the integration and the data requirements. However, there were limits to how much the ERP system could be expanded. For example, the ERP system could not handle the increasing requirements for rich product data on the website (e.g., videos, product sales descriptions, customer comments, ratings, user generated images, etc.). After searching for a product information management (PIM) system to handle this, Hummel chose to access an external system through the ecommerce vendor, who customized a PIM system for the company's specific needs. This system was then integrated with the ERP and ecommerce system so that all inventory, prices, product information and rich content could be showcased on the website. The new PIM system could furthermore export data to the Brand Button (a mini version of the Hummel website which was placed on third party online retailers' sites as an iframe that opened as a light box), the mobile site that QR codes linked to the Microsoft Scala software used in the virtual walls in physical stores, and so on. Effectively, Hummel had built an integrated IT infrastructure by carefully wrapping the new consumer facing systems around the existing backend IT systems, which was tuned to the specific needs of the company.

When the company wanted to launch m-commerce, as an increasing proportion of the visitors entered the website from a mobile device, the backend was again further reconfigured by adding a mobile checkout and specific tracking for this platform. However, an entirely new frontend had to be created, as mobile design and navigation are significantly different from a desktop version.

As the digital B2C business grew, the workload for the Digital department increased rapidly. This was not only due to the internal workload, but also to external factors, as consumers shifted to digital channels for both sales and communications. Hummel had to create new roles in the Digital department in order to meet both the B2B and B2C customer expectation. This included a Copywriter (for enriching the product sales texts, the brand communication and the digital marketing campaigns), B2C Customer Service (as requests increased with sales volumes), and a B2B Ecommerce Specialist (to manage the B2B ecommerce platform, ensure that online retailers

followed Hummel's ecommerce guidelines, including supporting them with digital content and material, as well as installation of the Brand Button, on online retailer's websites).

All the roles in the Digital department were integrative roles in the company. For example, the B2C Customer Service employee's function was tightly integrated with B2B Sales and Customer service (e.g., to align the communication about delivery times or about production faults for products), Logistics service center (e.g., to ensure that the service center was instructed about individual returns and quality checks), Export (e.g., to be updated daily on local sales events, licensed Hummel collections, fake Hummel products and social media profiles that popped up), IT (e.g., regarding products that were not showing correct prices due to a mistake in the ERP system), Marketing (e.g., regarding missing packshots, new catalogues), and Product development (e.g., special collections with special attributes).

Finally, as the digital sales platforms became a larger part of daily business, the sales and customer service workload began shifting to the digital area. A digitally savvy employee was released from the Sales department to work in the Digital department. The employee became the much-needed link between the Digital and Sales departments.

By now, Hummel's managers and employees had become used to the company operating a B2C ecommerce business in addition to its traditional B2B business. The brand website with ecommerce facilities and integrated systems were running smoothly. All departments in the company were involved in different aspects of running ecommerce, and only a few regarded the new business opportunity as a threat at this stage. Even the CSO admitted that he had changed from being against B2C ecommerce to supporting it:

"There has been a rather big transformation and change in my mind-set within only few years. I have changed regarding [ecommerce], I know now that there is only one way to go – and I could not even contain that sentence preciously! But I know that we will end up selling full assortment." (Hummel CSO)

For Hummel, the new B2C ecommerce business contributed to the company's growth, both directly (by additional business) and indirectly (by influencing and controlling the digital B2C space), as the CEO explained,

"We don't have a big pressure on it [B2C] today, but I think that the hidden benefit will always be a lot, lot bigger. It's like an iceberg. I think that for every 1 shoe we sell online, we have influenced 9 sales elsewhere." (Hummel CEO)

The B2C business had notably higher gross margins compared to the B2B business, and was more profitable. The B2C business also created greater awareness of the Hummel brand. For the first time in the company's history, there was a direct connection between the brand and its consumers. Furthermore, Hummel had built a valuable and relevant set of digital capabilities. The

company could now take control of its digital presence and, more importantly, the relationship and interaction with end-consumers – a strategic control that had significantly enhanced Hummel’s market influence. The CEO commented on the strategic control by highlighting the business alignment the company had achieved,

“We have aligned our own communication and we have aligned regional communication, and we are on our way to reaching international alignment. We have the platforms aligned now, meaning that countries have the same platform. I think we had 22 or 24 different platforms [websites] a few years ago, which we have now changed into one.” (Hummel CEO)

The B2C ecommerce sales were increasing every month, but the business was still carefully run as a brand support tool so as not to upset the B2B business. Although it was possible to push the sales more aggressively, Hummel’s management still did not want to focus on sales KPIs, but rather on giving the B2C consumers an excellent experience when they purchased from, and interacted with, the company. Therefore, the company neither invested in separate stock for the website, nor allowed activities that pushed sales such as visible marketing for the ecommerce sites, discounts or incentives to buy.

The development of the new B2C digital resources proved to enhance the existing B2B business as well. The Brand Button and PIM system was built to support the B2B retailers, and the ‘storefinder’ on the B2C website created traffic to the B2B stores and the digital knowhow, which the company had developed helped boost the B2B online retail sales. The CEO commented on this fact, saying: *“We now have the professional tools and the capability to deal with online retailers in a successful manner, which we didn’t have before. It is in fact today close to 12% of our total worldwide sales. It was below 1% before.”* (Hummel CEO)

In summary, the new digital B2C strategy, IT systems and resources shaped Hummel’s new business infrastructure and influenced the new organizational logic and patterns of integrating the different departments’ work going forward. The CEO summed it up, saying,

“It is simply a transformation of the entire organization. Not only thinking and working with, but actually knowing what this whole digital thing is and how can we work it into every single part of the strategy that we have now. None of that would work without a digital strategy at the same time.” (Hummel CEO)

Table 4. Transforming Dynamic Capability: Leveraging, Creating, Accessing and Releasing Resources

	IT Resources	Business Resources
Leveraging	<p>IT department knowhow:</p> <ul style="list-style-type: none"> - Further utilize IT department's functions and processes for B2C use <p>B2B ERP system:</p> <ul style="list-style-type: none"> - Further utilize ERP system for B2C use – e.g., for marking all current products for sale on the B2C website <p>Logistics and Finance systems:</p> <ul style="list-style-type: none"> - Further extend B2B logistics and finance IT systems and integrations for B2C - e.g. for automated/faster returns 	<p>Logistics & warehousing, Finance, Sales and Customer services, and Marketing departments:</p> <ul style="list-style-type: none"> - Further utilize department functions and processes for B2C use - Further utilize warehouse, Service Center and systems for B2C - e.g. for new packaging, better shipment deals as volumes grew, etc. - Further utilize Finance department's functions and processes for B2C - e.g. for incorporating B2C figures in management reports - Further leverage existing Marketing product images and marketing material for B2C use - Further leverage brand awareness for traffic to the website and brand desire for ecommerce sales - Leverage the Digital department's functions and processes for further digital growth e.g., formalized management reporting, business unit budgets, etc. <p>Ecommerce:</p> <ul style="list-style-type: none"> - Launch full ecommerce
Creating	<p>Hybrid Resources:</p> <ul style="list-style-type: none"> - Create new roles: customer service, copywriter, online B2B support, digital trainee to ensure digital education - Local country websites on the global platform 	
Accessing	<p>Content Management System, Ecommerce, Payment Systems and IT & Digital Knowhow:</p> <ul style="list-style-type: none"> - Further access external systems and knowhow - Use vendor's developers in order to continuously build and customize the ecommerce system to fit the company's evolving needs – e.g., Created localized country websites on global website with local products - Use vendor's developers in order to build "Brand Button" - a mini version of the website which could be installed as an iframe on a third-party website - Use vendor's developers in order to build "BrandZip" - a product information management (PIM) system - Use vendor's developers to build a mobile website and m-commerce 	
Releasing		Moved a B2B Sales employee as workload (e.g., customer service, order management, etc.) shifted to digital channels
New and Reconfigured Resources	<ul style="list-style-type: none"> - Digital department - New Digital employees, including B2B Sales employee to be used for Digital Sales - Governance processes, SoPs, and structures for ecommerce - Global website with CMS, ecommerce and payment systems and new localized websites <ul style="list-style-type: none"> - Brand Button (iframe) - Brand Zip (PIM system) - Mobile website and m-commerce - Full ecommerce 	
	<ul style="list-style-type: none"> - Internal and external IT knowhow for B2C use - ERP system for automated B2C use - Logistics and Finance systems for automated B2C 	<ul style="list-style-type: none"> - Logistics department & warehousing, Finance department, Sales and Customer services, Marketing department procedures for automated

	use	B2C use - Hummel brand for B2C use
--	-----	---------------------------------------

Table 4 summarizes how Hummel exercised its Transforming capability, leveraging and further developing IT, business and hybrid resources to significantly extend its B2C business and complement the B2B business.

DISCUSSION

Our research was motivated by the need to better understand how alignment can be achieved when a traditional B2B company decides to implement a digital strategy that inherently is transfunctional and leverages IT across all business processes. Whereas extant alignment research has typically looked at alignment between IT function and business strategies at the enterprise level, it has left open the question of how alignment of business and IT resources occur across multiple business processes. To address this gap, we conducted a longitudinal analysis of Hummel's journey to enact its B2C digital strategy using the dynamic capabilities lens. Figure 1 below presents our overall model that resulted from the synthesis of theory and our findings.

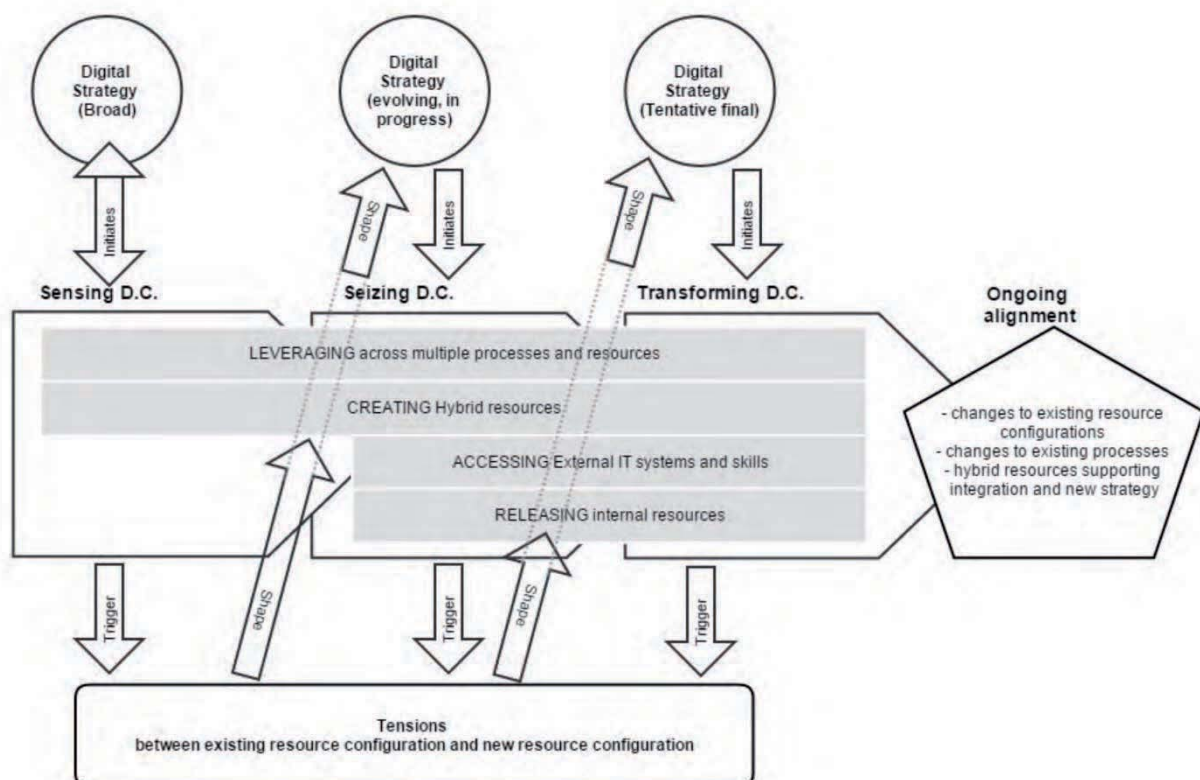


Figure 1. Model of Resource Reconfiguration and Dynamic Alignment for Digital Strategy

Process of Dynamic Alignment for Digital Strategy

Our study first supports the view that alignment is an ongoing process (Chan and Reich 2007) as seen by the long time period (nearly four years) required for Hummel's transformation. Second, our study also provides deeper insights into this dynamic process. We show that this ongoing process follows, on a broad level, the three types of dynamic capabilities exercised i.e., Sensing, Seizing, and Transforming. Theoretically, the sequence of dynamic capabilities in the process is important as our study shows us that each particular dynamic capability is critical to deal with specific challenges at each stage of the alignment.

In the first stage, the Sensing capability is required for alignment as there is a high level of uncertainty surrounding the new digital strategy, the implications for existing resource configurations and which new strategic and technological opportunities should be pursued. In Hummel's case, the senior management, while conscious of the need for a new strategy, was not fully able to articulate the exact scope. Thus there was a strong focus on building resources to help it scan and make sense of the new digital strategy. In the next stage, the Seizing capability has to address the alignment challenge, especially for digital strategy, of the execution of extensive internal changes to different resources and transfunctional processes. Also, in digital strategy, the Seizing capability has to take into account the external digital technologies and platforms that could be used to align with the new strategy. For Hummel, the critical decision was to choose between the in-house digital solution versus an outsourced solution and the series of actions required to support the decision. Finally, the Transforming capability deals with the final challenge to alignment, which is the full integration of the newly reconfigured transfunctional resources and processes with existing structures, resources, and processes.

While this broad process is helpful, a third and more important aspect of this process is the micro actions enacted within each dynamic capability to achieve the ongoing alignment (Karpovsky and Galliers 2015). Although, each dynamic capability could theoretically be exercised through all the four modes of leveraging, creating, accessing, and releasing resources, our findings suggest that there are distinct patterns as to the enactment of each of the modes with respect to the dynamic capabilities.

One, leveraging actions were integral to all dynamic capability stages. The transfunctional and pervasive nature of digital strategy resulted in systems, knowledge and processes being leveraged from multiple departments – IT, logistics and warehouse, finance, sales, customer services - throughout Sensing, Seizing, and Transforming (see Tables 2, 3, and 4). For example, it was

necessary to leverage the existing ERP system to support the backend of the B2C website, and to adapt B2B logistics, finance and sales processes to support B2C.

Two, creating actions were also equally important across the dynamic capabilities stages. Unlike leveraging actions that targeted existing resources, creating actions led to a new resource category that we termed as hybrid resources – a fusion of business and IT resources. Our study suggests that given the transfunctional nature of digital strategy, hybrid resources – in which the IT and business aspects were tightly fused - were critical to the ongoing alignment. The Digital Department exemplifies a hybrid resource that played an integrative role in the development of resources and processes. Specifically, we identify three lateral dimensions of the integrative work of the Digital department - 1) between IT and business (which is the usual focus in traditional alignment studies), 2) across various departmental processes, and with 3) with external partners. Because these hybrid resources integrated across these three dimensions, they were able to support many of the leveraging and accessing actions that required a strong integrative driver. For example, the “data wash” – which leveraged existing data, as well as created data standards and processes for the entire enterprise – required IT personnel’s involvement as they were familiar with the current product data repositories, the external vendor who was familiar with the new frontend B2C systems that the data would have to flow through, as well as the various business areas such as product development, sales and marketing, etc. who would have to use and input future data. The various roles in the digital department reflected this fusion and integrative focus. For example, the Ecommerce Coordinator was the connecting bridge between IT and vendors, between B2C ecommerce and B2B Sales, Logistics, Finance, Marketing, and between the HQ and the local offices.

Three, accessing was primarily for IT expertise and systems from vendors and more salient when the organization was exercising the Seizing capability (to a lesser extent, the Transforming capability). This is consistent with the view that the systems and technical knowledge per se, are not enduring sources of competitive advantage. Hence, given the ease of extensibility in IT platforms and the need to reconfigure resources quickly to align with the new digital strategy, it is logical to obtain IT resources from external vendors. Finally, releasing was relatively minor in this case, a reassignment of certain personnel from the B2B to the growing B2C business.

Iterating among Digital Strategy, Dynamic Capability Modes and Tensions

While the literature has noted that IT does not only align to business, but that it also shapes business strategy, there has been relatively little longitudinal work that examines this dynamic. This

case provides rich detail on this basic notion albeit with a twist. In our study, we view business and IT strategy as “fused” digital strategy (Bharadwaj et al. 2013); thus it is not so much the interaction between business and IT strategy, but between digital strategy and the resources and processes across multiple functions that are being created. We found cycles of moving first from a broad digital strategy, to tentative steps at resource reconfiguration, which triggered tensions from existing resources, which then shaped the evolving digital strategy (See Figure 1).

Specifically, when Hummel exercised its Sensing dynamic capability, they only identified a new digital strategy at a high level. That resulted in the realization of lack of alignment with existing resources, then an assessment of what could be leveraged, and finally the initial creation of the hybrid Head of Digital position. We found that the attempts to leverage existing resources quickly triggered tensions – for example, from the CSO who was concerned about his current B2B distribution channels, from employees in other departments who were concerned about increased workloads, and from the IT manager who was concerned about his ERP system that had been optimized for B2B data and processes. These tensions shaped the further evolution of the strategy – the B2C strategy is now articulated specifically to be non-cannibalizing. The tensions also shaped how resources and processes were created and leveraged e.g., the initial B2C website was developed primarily as a support and not a sales tool.

In turn, this new non-cannibalizing position of Hummel’s digital strategy then shapes the next cycle of resource reconfiguration during the Seizing dynamic capability, leading to the critical decision to develop in-house B2C capabilities. The in-house B2C approach required significant investment and effort in expanding the digital department, adapting processes across multiple departments to support B2C, customizing a vendor solution for Hummel’s specific needs, and eventually launching a global website. The tensions continue to shape the strategy and resource development – for example, the initial website launch was for a limited set of products.

As the resources and processes across multiple functions were reconfigured and aligned to the evolving digital strategy, they also had some influence over the digital strategy. This appears to occur through two ways. First, with the involvement of personnel from multiple departments, and through the integrative efforts of the hybrid resources (digital department), we observed that the mindset of the organization towards the B2C digital strategy gradually shifted to be more positive. With the shift in mindset, personnel in different functions also began to understand and appreciate the strategy, and their role in the new processes. For example, the CSO admitted that he had changed from being straight against B2C ecommerce to supporting it throughout the years. Secondly, the emerging set of reconfigured resources also began to suggest new strategic

opportunities. For example, the development of the new B2C digital resources proved to enhance and support the existing B2B business as well.

IMPLICATIONS FOR RESEARCH AND PRACTICE

We sought to understand how organizational IT and business resources and processes are created to align with a new digital strategy. Our longitudinal study of Hummel contributes to the paucity of research on the dynamics of alignment. It also complements prior studies on the dynamics of alignment (e.g. (Sabherwal et al. 2001), by articulating that the broad process of alignment for digital strategy is not only about the amount or pace of change, but also about dealing with the evolving and emergent challenges of alignment—from sensing where and what changes and alignment to make (*sensing*), to tackling how to change and align (*seizing*), and finally to integrate the changes and realign the entire organization to the new digital strategy (*transforming*).

Our longitudinal model of alignment also shows how, across the interrelated dynamic capabilities, concrete and specific actions are taken to enable ongoing alignment. We offer a systematic set of four modes of action – leveraging, creating, accessing and releasing – and identify patterns in the way that the modes are used. In our digital strategy context, leveraging existing resources needs to occur across multiple business processes, throughout all three dynamic capabilities, and moves increasingly towards leveraging new resources and processes as alignment progresses. Creating has a strong emphasis on hybrid IT-Business resources that play an integrative role, and comes to the forefront particularly in the Seizing capability. Accessing focused on technical platforms, systems and expertise to overcome internal knowledge and resource gaps in new digital technology. Releasing played a relatively minor role in our study. Further research is needed to assess whether releasing mode is more major in situations where the digital strategy is positioned to compete with the existing business.

Finally, our longitudinal model of alignment highlights the dynamic interplay among the exercise of dynamic capabilities, evolving digital strategy, and tensions. We see how the exercise of dynamic capabilities to develop new resources and processes can trigger tensions, and these tensions in turn may influence the evolution of strategy, which in turn drives subsequent resource development. Digital strategy should not be viewed simply as a stable and objective concept but as one that is tentative and continuously evolving. Having said that, we do not propose that the digital strategy of an organization would swing wildly from one focus to another. Instead, our study shows that there should always be a degree of tentativeness and that digital strategy would evolve from a broad strategy at the onset and converge as the organization iterates among its strategy, actions, and

the tensions that arise.

With regards to the role of tensions, our findings somewhat resonate with the concerns in the extant research on alignment (Galliers 2004) in that existing configurations of resources and processes that had been previously aligned might pose significant constraints on organizations embarking on new strategic directions. This is especially salient for digital strategy since it typically cuts across different functions and entails the use of new technology. It is instructive to note how early tensions in Hummel's case had significant ramifications on its subsequent approach i.e., the decision that the new B2C would play a support role and not a sales role. Future research could further explore the strategies that organizations could take to either overcome these tensions or as in this case, work around the functions and resources by modifying and scoping its digital strategy.

References

- Benbasat, I., D. K. Goldstein, and M. Mead. 1987, "The Case Research Strategy in Studies of Information Systems," *MIS Quarterly* (11:3), Sep., pp. 369-386.
- Bergeron, F., L. Raymond, and S. Rivard. 2004, "Ideal Patterns of Strategic Alignment and Business Performance," *Information & Management* (41:8), pp. 1003-1020.
- Bharadwaj, A., O. A. El Sawy, P. A. Pavlou, and N. Venkatraman. 2013, "Digital Business Strategy: Toward a Next Generation of Insights," *MIS Quarterly* (37:2), pp. 471-482.
- Burn, J. M. 1996, "IS Innovation and Organizational Alignment-a Professional Juggling Act," *Journal of Information Technology* (11:1), pp. 3-12.
- Chan, Y. E., S. L. Huff, D. W. Barclay, and D. G. Copeland. 1997, "Business Strategic Orientation, Information Systems Strategic Orientation, and Strategic Alignment," *Information Systems Research* (8:2), pp. 125-150.
- Chan, Y. E., and B. H. Reich. 2007, "IT Alignment: What have we Learned?" *Journal of Information Technology* (22:4), pp. 297-315.
- Courtney, H., S. Mithas, and R. Agarwal. 2012, "Digital Business Strategies and the Duality of IT," *IT Professional* (14:5), pp. 0002-4.
- Croteau, A., and F. Bergeron. 2001, "An Information Technology Trilogy: Business Strategy, Technological Deployment and Organizational Performance," *The Journal of Strategic Information Systems* (10:2), pp. 77-99.
- Daniel, E. M., and H. N. Wilson. 2003, "The Role of Dynamic Capabilities in E-Business Transformation," *European Journal of Information Systems* (12:4), pp. 282-296.

- Danneels, E. 2002, "The Dynamics of Product Innovation and Firm Competences," *Strategic Management Journal* (23:12), pp. 1095-1121.
- . 2008, "Organizational Antecedents of Second-order Competences," *Strategic Management Journal* (29:5), pp. 519-543.
- . 2007, "The Process of Technological Competence Leveraging," *Strategic Management Journal* (28:5), pp. 511-533.
- . 2011, "Trying to Become a Different Type of Company: Dynamic Capability at Smith Corona," *Strategic Management Journal* (32:1), pp. 1-31.
- Dierickx, I., and K. Cool. 1989, "Asset Stock Accumulation and Sustainability of Competitive Advantage," *Management Science* (35:12), pp. 1504-1511.
- Drnevich, P. L., and D. C. Croson. 2013, "Information Technology and Business-Level Strategy: Toward an Integrated Theoretical Perspective," *MIS Quarterly* (37:2), pp. 483-509.
- Eisenhardt, K. M., and J. A. Martin. 2000, "Dynamic Capabilities: What are they?" *Strategic Management Journal* (21:10-11), pp. 1105-1121.
- El Sawy, O. A. 2003, "The IS Core IX: The 3 Faces of IS Identity: Connection, Immersion, and Fusion," *Communications of the Association for Information Systems* (12:1), pp. 39.
- Galliers, R. D. 2004. "Reflections on Information Systems Strategizing," C. Avgerou, C. Ciborra and F. Land (eds.), Oxford, UK: Oxford University Press, pp. 231 - 262.
- Ghemawat, P. 1991. *Commitment: The Dynamic of Strategy*, Free Press, New York.
- Grover, V., and R. Kohli. 2013, "Revealing Your Hand: Caveats in Implementing Digital Business Strategy," *MIS Quarterly* (37:2), pp. 655-662.
- Gupta, Y. P., J. Karimi, and T. M. Somers. 1997, "Alignment of a Firm's Competitive Strategy and Information Technology Management Sophistication: The Missing Link," *Engineering Management, IEEE Transactions On* (44:4), pp. 399-413.
- Helfat, C. E., S. Finkelstein, W. Mitchell, M. Peteraf, H. Singh, D. Teece, and S. G. Winter. 2009. *Dynamic Capabilities: Understanding Strategic Change in Organizations*, John Wiley & Sons.
- Henderson, J. C., and N. Venkatraman. 1993, "Strategic Alignment: Leveraging Information Technology for Transforming Organizations," *IBM Systems Journal* (32:1), pp. 4-16.
- Karpovsky, A., and R. Galliers. 2015, "Aligning in Practice: From Current Cases to a New Agenda" *Journal of Information Technology* (forthcoming)
- Kearns, G. S., and R. Sabherwal. 2007, "Strategic Alignment between Business and Information Technology: A Knowledge-Based View of Behaviors, Outcome, and Consequences," *Journal of Management Information Systems* (23:3), pp. 129-162.

- Markus, M. L., and C. Loebbecke. 2013, "Commoditized Digital Processes and Business Community Platforms: New Opportunities and Challenges for Digital Business Strategies," *MIS Quarterly* (37:2), pp. 649-654.
- Mason, J. 1996. *Qualitative Researching*, Sage Publications, Inc., Thousand Oaks, CA, US.
- Mithas, S., A. Tafti, and W. Mitchell. 2013, "How a Firm's Competitive Environment and Digital Strategic Posture Influence Digital Business Strategy," *MIS Quarterly* (37:2), pp. 511-536.
- Montealegre, R. 2002, "A Process Model of Capability Development: Lessons from the Electronic Commerce Strategy at Bolsa De Valores De Guayaquil," *Organization Science* (13:5), pp. 514-531.
- Oh, W., and A. Pinsonneault. 2007, "On the Assessment of the Strategic Value of Information Technologies: Conceptual and Analytical Approaches," *MIS Quarterly* pp. 239-265.
- Queiroz, M., T. Coltman, R. Sharma, P. Tallon, and P. Reynolds. 2012. "Strategic IT Alignment: An Evaluation and Process-Level Reconceptualization of the Construct," *Academy of Management Annual Meeting: The Informal Economy* pp. 1-32.
- Rai, A., P. A. Pavlou, G. Im, and S. Du. 2012, "Interfirm IT Capability Profiles and Communications for Cocreating Relational Value: Evidence from the Logistics Industry," *MIS Quarterly* (36:1), pp. 233-262.
- Reich, B. H., and I. Benbasat. 1996, "Measuring the Linkage between Business and Information Technology Objectives," *MIS Quarterly* pp. 55-81.
- Reynolds, P., and P. Yetton. 2015, "Aligning Business and IT Strategies in Multi-Business Organizations," *Journal of Information Technology* (forthcoming)
- Sabherwal, R., R. Hirschheim, and T. Goles. 2001, "The Dynamics of Alignment: Insights from a Punctuated Equilibrium Model," *Organization Science* (12:2), pp. 179-197.
- Sarker, S., S. Sarker, A. Sahaym, and N. Bjørn-Andersen. 2012, "Exploring Value Cocreation in Relationships between an ERP Vendor and its Partners: A Revelatory Case Study," *MIS Quarterly* (36:1), pp. 317-338.
- Street, C. T. 2006. *Evolution in IS Alignment and IS Alignment Capabilities Over Time: A Test of Punctuated Equilibrium Theory*, Unpublished Doctor of Philosophy Thesis, Queen's University.
- Tallon, P. P. 2008, "A Process-Oriented Perspective on the Alignment of Information Technology and Business Strategy," *Journal of Management Information Systems* (24:3), pp. 227-268.
- Teece, D. J. 2009. *Dynamic Capabilities and Strategic Management: Organizing for Innovation and Growth: Organizing for Innovation and Growth*, Oxford University Press.
- . 2007, "Explicating Dynamic Capabilities: The Nature and Microfoundations of (Sustainable) Enterprise Performance," *Strategic Management Journal* (28:13), pp. 1319-1350.



- . 1982, "Towards an Economic Theory of the Multiproduct Firm," *Journal of Economic Behavior & Organization* (3:1), pp. 39-63.
- Teece, D. J., G. Pisano, and A. Shuen. 1997, "Dynamic Capabilities and Strategic Management," *Strategic Management Journal* (18:7), pp. 509-533.
- Wheeler, B. C. 2002, "NEBIC: A Dynamic Capabilities Theory for Assessing Net-Enablement," *Information Systems Research* (13:2), pp. 125-146.
- Woodard, C. J., N. Ramasubbu, F. T. Tschang, and V. Sambamurthy. 2013. "Design Capital and Design Moves: The Logic of Digital Business Strategy," *MIS Quarterly* (37:2), 06, pp. 537-564.
- Yin, R. K. 2003. *Applications of Case Study Research (Applied Social Research Methods)*, Sage Publications, Thousand Oaks.
- . 1989. *Case Study Research: Design and Methods (Applied Social Research Methods)*, Sage Publications, Thousand Oaks.
- Zahra, S. A., and J. G. Covin. 1993, "Business Strategy, Technology Policy and Firm Performance," *Strategic Management Journal* (14:6), pp. 451-478.
- Zollo, M., and S. G. Winter. 2002, "Deliberate Learning and the Evolution of Dynamic Capabilities," *Organization Science* (13:3), pp. 339-351.



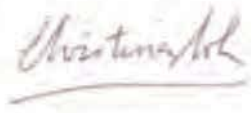
Co-author statement

Title of paper	Aligning with new digital strategy: a dynamic capabilities approach
Journal	Journal of Strategic Information Systems (JSIS)
Published	Submitted 12 Feb 2015

1. Co-author (PhD student)	Rina Hansen
Contribution (%)	50%
2. Co-author	Adrian Yeow
Contribution (%)	25%
3. Co-author	Christina Soh
Contribution (%)	25%

1. Co-author (PhD student)		Rina Hansen			
I hereby declare that the above information is correct		Yes	<input checked="" type="checkbox"/>	No	
12 Feb 2015					
Date		Signature			
2. Co-author		Adrian Yeow			
I hereby declare that the above information is correct		Yes	<input checked="" type="checkbox"/>	No	
12 Feb 2015					
Date		Signature			



3. Co-author	Christina Soh			
I hereby declare that the above information is correct	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
<div style="text-align: center;"></div>				
12 Feb 2015				
Date		Signature		

Source: <https://cbsshare.cbs.dk/vipservices/PhD/Your%20PhD%20Study/Thesis%20and%20Assessment/Pages/Submission.aspx>

Research Paper 3

Hansen, R. 2015, "Critical Challenges in IT and Business Alignment for Omnichannel Retailing", *working paper*.

Critical Challenges for IT and Business Alignment in Omnichannel Retailing

Abstract

The emergence of the Internet, mobile devices and social media is revolutionizing the retail customer experience. Customers use multiple channels to maximize their shopping experience and they expect a seamless brand experience across all channels. These changes in customer technology capabilities drive the new IT capabilities required to support the expected seamless brand experience. To offer this experience, brands must make the transition from a multichannel strategy to an omnichannel strategy. To investigate this transition, we present a longitudinal revelatory case study of a sports fashion company. Four findings explain how alignment between an omnichannel strategy (an extension to the Keller brand management model) and an IT strategy (an extension to the Reynolds and Yetton business and IT alignment model) creates value.

1. INTRODUCTION

For decades, retailers have sold their goods through different outlets, including physical stores, catalogues and home shopping. To do this, they communicated with their customers through posters and flyers, and advertisement in magazines, radio and TV. Frequently, a successful retailer started with one type of outlet and later added another distribution channel. An early, well-known example is the American department store, Sears. In 1886, it launched a catalogue business. Much later, in 1925, it opened its first physical store to complement its catalogue business.

More recently, the rise of the Internet and the development of digital devices, including smartphones, tablets and wearables, have created new distribution channels for retailers. Customers can now shop and interact directly with brands anywhere, 24/7. Developing these channels creates new challenges for lifestyle and fashion brands, which carry high emotional value for customers, including symbolic and status connotations (Kapferer 2008).

These consumers are strongly attached to their favorite brands and want to engage with them through a variety of channels (Keller 2010). This new multichannel, multimedia retail marketing environment presents two potentially incompatible challenges. One is that brands must manage each channel and communication option to maximize the direct sales and brand equity. The other is that brands must also design and implement the channel and communication options to realize the potential synergistic sales and brand equity cross-channel effects.

The first challenge has previously been managed within a market segmentation strategy. Each customer is assumed to be a member of a specific market segment. In the case of Sears, it was assumed that the catalogue customer purchased only from the catalogue and not from the store and vice versa. In that strategy, the customer is a customer of only one channel. Effectively, the channel 'owns' the customer.

The second challenge has previously been framed in the negative terms of the cannibalization of one channel by another channel (Riggins 2004). In the new emergent omnichannel, multimedia retail market, the challenge is the positive effect of capturing synergies across channels (Keller 2010). The customer is a customer of the brand and not of a channel. So, a channel does not own its customers. Instead, customers use all channels to maximize their shopping experience and expect a seamless shopping experience across all channels.

There is an additional complication around how the company uses IT to manage the interactions between its channels. The complication is that the company cannot control the range of technologies that its customers employ to interact with the various channels. So, to be competitive, a company must match its customers' pace of technical change and always be present on customers' devices and social media platforms.

For example, consider this omnichannel customer experience. A girl notices a dress on Instagram, which her favorite blogger posted in the morning. At lunchtime, she walks into a store to try on the dress. The store does not have her size. The store assistant quickly pulls up the website on a tablet on which she can order the right size. However, now the girl has

actually seen the dress, she is not sure that it suits her. She says that she will think about it and walks back to work.

On the bus going home, she sits quietly and browses through the messages on her mobile. She receives an email with a newsletter promoting the dress she just tried on in the store. She clicks the link and buys it through the mobile site. The dress is delivered to her home next morning before she leaves for work. On the weekend, she wears the dress to a party and spills wine on it. Concerned about how she can clean it, she posts a picture of the damage on Facebook asking for help. The retailer, which was tagged in the picture, sees the post and offers advice on wash and care of the dress.

For a brand, to make the transition from a multichannel strategy to an omnichannel strategy, a retailer must develop a strategy that includes the behavior of the young girl described above and many variations on that behavior. Having developed its omnichannel strategy, the retailer must implement it. Critically, the retailer must align its IT with the new omnichannel strategy. Effectively, the retailer must find specific answers to two research questions:

Research Question A: What are the critical strategic differences between a multichannel and an omnichannel marketing strategy?

Research Question B: How do IT governance, IT competences and IT flexibility create value in omnichannel strategies?

The general answer to research question A requires that the Keller (2010) multichannel brand strategy is extended to model the benefits from channel interactions. The general answer to research question B is to show how governance, competences and flexibility, three of the four profit drivers in Makadok's (2010; 2011) theory of profit, are aligned with the omnichannel strategy. To do this, we extend the Reynolds and Yetton (2015) alignment model, which shows how increases in IT structural alignment, IT functional alignment and IT temporal alignment, increase IT governance, IT competences and IT flexibility, respectively.

To investigate the two research questions, we present a longitudinal revelatory case study of the Danish sports fashion brand, Hummel, covering 2010 to 2014. The study focuses on top management strategizing to develop a digital strategy for omnichannel retailing. The rich data from the case study allows us to theorize about the form of such a digital strategy and, specifically, its implications for business and IT strategic alignment.

The remainder of this paper is structured as follows. In the next section, we present a brief overview of Keller (2010) and Reynolds and Yetton (2015) under the heading of ‘Background Literature’. Then, the case study methodology is described. The case findings are presented. Finally, the limitations and contributions to theory and practice are described.

2. BACKGROUND LITERATURE

A review of IS research on multichannel and omnichannel retailing reveals that there is limited research on the former and no published research on the latter (See Hansen 2015). The limited multichannel IS research draws on the marketing, management, retail and service literatures (Bang et al. 2013; Hulland et al. 2007; Riggins 2004) as Webster and Watson (2002) comment, “because IS is an interdisciplinary field straddling other disciplines, you must look not only within the IS discipline when reviewing and developing theory but also outside the field” (p.4).

Within the marketing literature, there is an overlap in the use of the terms multichannel and omnichannel. Here, multichannel retailing is defined as the set of activities involved in communicating with and selling merchandise to consumers through more than one channel (Zhang et al. 2010), as illustrated by the Sears example above. Omnichannel retailing is defined as being customer-centric rather than channel-centric (Brynjolfsson et al. 2013). An omnichannel retailer offers the customer a coherent and seamless brand and shopping experience across channels (Hansen and Sia 2015).

We begin by reviewing the limited literature on multichannel and omnichannel strategies. The critical difference is the independence of channels in a multichannel strategy compared with the interdependence among channels in an omnichannel strategy. The extant strategy

literature identifies three critical challenges for companies intending to transition from a multichannel to an omnichannel strategy. The challenges are organizational and governance conditions, technology and data capabilities, and organizational flexibility.

These three challenges map directly onto the three alignment conditions in the Reynolds and Yetton (2015) alignment model in which structural alignment, functional alignment and temporal alignment are the antecedent conditions for governance, competence and flexibility to create value (See Makadok 2010; 2011). Here, we briefly review the Reynolds and Yetton (2015) model as an analytical framework within which to analyze the strategic change from a multichannel strategy to an omnichannel strategy.

2.1 Multichannel and Omnichannel Strategies

The omnichannel marketing literature examines the issue of designing the optimal channel strategy across channels and touch points to ensure that all channels work together in a transparent and synergistic way. The performance of the integrated system is greater than the sum of its parts (Keller 2010; Zhang et al. 2010). To do this, retailers must offer a seamless integration between offline and online operations. There is a reciprocal effect of an omnichannel retailer's online performance on customer offline brand beliefs and vice versa. Customers perceive brand experiences holistically (Kwon and Lennon 2009).

This approach, fulfilling the customer expectation of seamless access to products across channels, is critical to customer purchase decisions and to increasing customer retention rates (Bendoly et al. 2005; Van Bruggen et al. 2010; Webb and Lambe 2007). This seamless approach pays off for companies because multichannel customers are more valuable than single-channel customers. They purchase more from the retailer in the long-term when they have more integrated channel options (Avery et al. 2012; Bendoly et al. 2005; Chung et al. 2012; Zhang et al. 2010).

Keller (2010) argues that successful retailers will be those that offer customers integrated shopping experiences that skillfully "mix and match" direct channels, B2C, and indirect channels, through B2B partners, via physical stores, Internet, telephone, catalogs, and other

channels. His framework includes direct channels, interactive channels, and indirect channels. *Direct channels* involve selling through personal contacts from the company to prospective customers, including by mail, phone, Internet, mobile, and in-person visits. *Indirect channels* involve selling to customers through third-party intermediaries, including agents or broker representatives, wholesalers or distributors, and retailers or dealers. In terms of marketing communications, channels can be broadly classified into personal communications and mass communications. *Personal communications* involve 1-to-1 communications between a brand representative and an individual customer, including personal selling, direct marketing, online marketing, word-of-mouth. *Mass communications* involve communications to groups of consumers, including advertising, sales promotions, events, and experiences (Keller 2010, p.58).



Figure 1 Keller's (2010) Model of Marketing Integration (p.59)

The literature argues that omnichannel retailing will become the dominant strategy. In addition, the literature assumes that companies will differ in how they strategize and implement omnichannel retailing (Sharma and Mehrotra 2007; Sparks 2003; Zhang et al. 2010). However, these differences are not understood because the literature lacks a structured overview of the conditions for developing an integrated omnichannel channel approach. The

absence of such an overview is the motivation for Research Question A: ‘What are the critical strategic differences between a multichannel and an omnichannel marketing strategy?’

Without such a strategic framework, it is difficult to plan the transition from a multichannel to an omnichannel retailer.

The extant literature identifies three critical challenges for companies intending to transition from a multichannel to an omnichannel strategy. These are organizational and governance conditions (Bendoly et al. 2005; Brynjolfsson et al. 2013; Sharma and Mehrotra 2007; Van Bruggen et al. 2010; Wilson and Daniel 2007; Zhang et al. 2010); technology and data capabilities (Bang et al. 2013; Brynjolfsson et al. 2013; Hulland et al. 2007; Wilson and Daniel 2007; Zhang et al. 2010); and organizational flexibility (Brynjolfsson et al. 2013; Chatterjee 2010; Keller 2010; Kwon and Lennon 2009; Wilson and Daniel 2007; Zhang et al. 2010). This is the motivation for Research Question B: How do IT governance, IT competences and IT flexibility create value in omnichannel strategies?

Makadok’s (2010, 2011) theory of profit explains how governance, competences and flexibility, the three critical challenges identified in the marketing literature above, create value. Drawing on Makadok’s theory, Reynolds and Yetton (2015) explain how the three forms of business and IT strategic alignment, namely, structural, functional and temporal alignment (see review by Chan and Reich 2007), create value by increasing governance, competence and flexibility, respectively. Here, we examine the effect on omnichannel retailing of each form of IT alignment.

2.2 Business and IT Alignment

Reich and Benbasat (1996) define alignment as “the degree to which the information technology mission, objectives, and plans support and are supported by the business mission, objectives, and plans” (p.56). In general, alignment between business and IT strategies has a positive effect on organizational performance (Bergeron et al. 2004; Chan et al. 1997; Croteau and Bergeron 2001; Kearns and Sabherwal 2007; Oh and Pinsonneault 2007; Preston and Karahanna 2009; Zahra and Covin 1993).

Specifically, Reynolds and Yetton (2015) show that, in multi-business organizations (MBOs), the critical governance challenge is the allocation of decision rights over IT to the corporate and business unit levels to create structural alignment. Here, treating channels as business units in a multichannel strategy, decision rights over IT resources would be allocated differently under a multichannel compared with an omnichannel strategy. In the former, more decision rights over IT would be allocated to the channel level compared with under the latter strategy. In particular, under a brand-based omnichannel strategy, decision rights over IT resources would be highly centralized to support and leverage the brand. The critical IT structural alignment challenge is to assign decision rights to co-ordinate the new IT platform brand capabilities and the reduced channel-specific IT capabilities.

Harmonizing how the channels work together so that the sum is greater than its parts is contingent on governance, coordination and transparency between channels (Zhang et al. 2010). Central governance of branding, assortment, fulfillment, prices and promotion can lead to harmonization across channels, including price alignment between direct and indirect channels, which can be directed by setting the reference point and benchmark in the direct stores and online channels. Promotions can be rolled out across all channels via central governance. That means that a customer is offered the same deal in stores, online, via mobile and social commerce, reinforcing the concept of a holistic brand presence (Brynjolfsson et al. 2013).

Having a strong existing IT infrastructure and IT skills is paramount for retailers implementing both multichannel and omnichannel strategies (Bang et al. 2013; Hulland et al. 2007; Wilson and Daniel 2007). However, the required IT architecture and back-end integration to support an omnichannel strategy is much more complex than the IT architecture required to support a multichannel strategy (Zhu and Kraemer 2002; Zhu 2004). Hulland et al (2007) state that IT technical skills relating to both systems hardware and software include not only technical knowledge but also the ability to deploy, use and manage those skills. Integration skills especially are typically immobile and, therefore, more difficult for companies to obtain, trade or substitute. Thus companies with greater IT and integration skills are more likely to implement an omnichannel strategy.

In the Reynolds and Yetton (2015) model, corporate and SBU business strategies are supported by IT functional strategies. Developing functional IT capabilities to leverage and support business capabilities creates distinctive competences, which create value (Makadok, 2010, 2011). In the case of a transition from a multichannel strategy to an omnichannel strategy, new IT functional capabilities, such as managing the large data sets generated by the latter compared with the former, must be developed or acquired, and old redundant IT capabilities must be decommissioned. This is a major challenge in organizational renewal.

In terms of omnichannel retailing, functional alignment creates value in three ways. The first is by leveraging technology to enable a brand seamless experience (Zhang et al. 2010). The second is by Integrating new technologies around legacy IT systems to establish and maintain an efficient omnichannel operation (Zhu 2004). The third is by harnessing the power of data and analytics for improved customer knowledge (Brynjolfsson et al. 2013).

Importantly, in the Reynolds and Yetton model (2015), the development of IT capabilities to leverage new business strategic capabilities takes time. In particular, this is true for the corporate IT platform capabilities. With respect to the transition to an omnichannel strategy, these capabilities include the IT capabilities to manage a brand strategy. The availability or non-availability of these capabilities creates path dependencies that both shape and constrain the subsequent IT strategic options. Selecting specific business and IT strategies and rejecting others reduces organizational flexibility to develop subsequent strategies. Increasing (decreasing) flexibility creates (limits) organizational value (Makadok 2010; 2011).

The emergence of the Internet, digital devices and new interactive technologies has changed the speed to market in many industries. Fast moving markets require correspondingly rapid strategic decision making by managers (Daniel and Wilson 2003). A rapid strategy and implementation cycle is a necessity to meet this requirement and, therefore, has become a key competitive factor in many industries, with different players trying out different mechanisms to reach customers quickly to improve customer satisfaction (Wilson and Daniel 2007). Consistent with this, Hulland et al. (2007) report that successful companies have an outward

focused perspective for IT development, including market sensing, brand management and customer service, rather than an internal perspective.

The three forms of alignment, structural alignment, functional alignment and temporal alignment, in combination with Makadok's (2010; 2011) profit drivers, governance, competence, and flexibility, create an analytical framework within which to examine the IT transition from a multichannel strategy to an omnichannel strategy. Zhang et al. (2010) argue that creating the appropriate organizational structure is the major challenge facing omnichannel retailers, because many retail organizations manage their channels in silos or in a decentralized manner, with separate teams responsible for each channel. This creates duplicate teams and inefficiency in the business processes. It also causes internal conflicts across channels and leads to inconsistent customer experiences due to a lack of coordination between channels (Webb and Lambe 2007).

Developing a cross-functional steering committee and creating multichannel leadership helps organizations transition towards omnichannel. However, there is no standard solution. Each organization must take into consideration the history, current management structure, branding strategy, existing distribution, and information systems (Zhang et al. 2010). The major challenge to delivering a seamless experience is mobile technology, augmented reality and wearables (Brynjolfsson et al. 2013). These technologies are blurring the lines between on and offline, and between physical and cyber space. Mobile technology brings the Internet to life in the pocket of the customer 24/7. Augmented reality lets consumers "try on" clothing in front of their computers or a screen in store, and wearables like Google Glass can give products an extra layer of attributes, including contents, customer ratings and comments, and suggestions for use.

Dynamic alignment creates value by maximizing companies' flexibility to respond to unforeseen threats and opportunities. To do this, organizations must minimize the path dependencies embedded in the strategic IT platform choices, which would significantly restrict future IT options. This requires unbundling of corporate and channel IT capabilities and the development of modular IT platform capabilities over time.

3. METHODOLOGY

A revelatory case study approach was chosen (Sarker et al. 2012; Yin 1989). Adopting this methodology, the omnichannel transformation was observed in its natural setting over time (Yin 2003). This approach generates a thick and rich account to support theory building (Benbasat et al. 1987).

Here, the theory building takes two forms. Both require a rich case account. One is to extend the Keller (2010) model of brand management in a multichannel retail strategy to model brand management within an omnichannel strategy. The other is to extend the Reynolds and Yetton (2015) model of business and IT strategic alignment in MBOs to explain performance in an omnichannel strategy, in which the assumption of SBU independence in an MBO strategy is relaxed in an omnichannel strategy.

3.1 Case Selection

Hummel is one of the oldest sportswear brands in the world. It was founded in 1923 in Hamburg, Germany, and is now based in Aarhus, Denmark. Hummel operates in the sport and lifestyle apparel, footwear and accessories market, with an annual turnover of US\$240 million. Before 2010, Hummel had pursued a B2B strategy, selling through its own sales force, distributors, agents and licensed partners in over 40 countries.

In 2010, Hummel recognized that, to compete against larger sport and lifestyle brands, including Adidas and Nike, it had to enter the B2C market. In 2012, Hummel began to introduce B2C ecommerce. In 2013, it launched its own stores and shop-in-shops. Critically, in 2014, Hummel began to integrate the shopping experience across stores and ecommerce to create a seamless shopping experience.

To do this, Hummel restructured to focus on the customer experience. This was the first step in implementing its omnichannel strategy. Interrogating the rich case data identifies the additional strategic demands on the IT resources when a retailer transitions from a MBO strategy to an omnichannel strategy. These extra demands are the basis for the extension to

the Keller (2010) model. Similarly, drawing on the rich case data, we explore how business and IT strategic alignment create value differently in MBOs compared with an omnichannel strategy.

The paper 'Aligning with new Digital Strategy: A Dynamic Capabilities Approach' (Hansen et al. 2015) examines the process dynamics by which new aligned competences are developed. The assumption is that alignment creates value. This paper builds on the paper by Hansen et al. (2015) to explain how value is created by alignment within an omnichannel strategy. Here, the analysis shows that the states of alignment and the mechanisms creating value vary between an MBO strategy and an omnichannel strategy. So, while much of the data collection is common between the two papers, the analysis and contributions are different.

3.2 Data Collection

The data collection commenced in August 2010 and concluded in December 2014. The sources of data include interviews, documents and observations. Forty-one interviews were conducted with members of the top management team (CEO, CMO, CSO) and the owner in the period from December 2010 through to the end of 2014. The interviews were in-depth, semi-structured and open-ended. The interviewer probed the why, how and what of the development of the top management's cognition and attitude towards the transformation project (Kvale and Brinkmann 2008). The interviews were recorded, transcribed and analyzed. Each interviewee was asked how she/he evaluated the B2C ecommerce strategy and, specifically for Hummel, how this judgment had changed over time.

In addition, seventy-five interviews with Hummel internal employees and external partners were conducted over a four-year period from mid 2010 to the end of 2014, along with forty-one cross-departmental group interviews (e.g., steering and project groups) that focused on how the company as a whole could develop omnichannel retail. The interviewees were predominantly departmental managers but all levels of the firm were represented. Interviews were between thirty minutes and two hours in length, were all tape-recorded, and extensive notes were made. Interviews with individuals focused on how the individuals or departments were involved in developing the B2C ecommerce. The cross-department groups interviews

lasted between one and two hours. They were also tape-recorded and extensive notes were made during the interviews.

In addition, a wide range of documents were reviewed. These included company documents (e.g., Brand book, country contracts, 2016 strategy and plans, yearly plans for each department, etc.), presentation slides regarding the digital strategy and subsequent updates to management, archives (e.g., historical marketing campaigns, website contracts, etc.), emails (e.g., between owner and management group, between management group and the digital team, etc.), meeting minutes (of meetings with different Hummel countries, management meetings, Go-to-Market and marketing meetings), and notes (by the author who worked closely on this transformation project).

3.3 Data Analysis

The case was initially written up chronologically, describing the key challenges, actions and milestones. This was presented in detail to senior management multiple times to verify the accuracy of data and of the interpretation (Mason 1996). We then applied theory and categorized the case study data according to Keller's (2010) marketing integrations framework and according to Reynolds and Yetton's (2015) analytical framework of IT and business alignment. From the detailed analysis, we first analyzed the IT and business alignment by iterating between theory and data. Then, by iterating between theory and data, we created a model that identified the characteristics of an omnichannel strategy.

4. CASE STUDY FINDINGS

Hummel had operated as a single channel supplier since 1923, with business solely through B2B channels via distributors, agents and partners. By the early 2000s, it had grown to operate in 40 countries. These business units or channels operated independently of any interference or control structures from the corporate headquarters. As its international success demonstrated, this B2B strategy worked well.

However, the emergence of the Internet highlighted the scattered and unaligned brand presence across markets and channels. Some SBUs, in markets like Korea, sold sport products exclusively through Hummel concept stores. Turkey and France sold fashion products through a mix of channels. Holland sold sport products, which they produced themselves under license, through B2B channels. In the home markets of Scandinavia and Germany, Hummel sold sport, fashion and children's products through B2B channels. Before 2010, Hummel had not explored or even considered the option of selling directly to consumers. The CEO stated:

"2010 was the year in which the Board of Directors decided to have a more strategic focus on the web and the possibilities it gave." (Hummel CEO)

He further explained that there were no existing B2C or digital knowhow, skills or resources within the company:

"The only thing I knew was that this thing [digital] was something we needed to do something about. Internally in the company, including myself, we had no knowledge at all as to what the world or market would bring in the next three or four years [in terms of digital]. So we needed something; we needed capacity and brainpower within this area. That was actually the only knowledge I really had."
(Hummel CEO)

With the emergence of the Internet, B2C ecommerce and social media, Hummel experienced increasing pressure from consumers to align its brand across channels, including launching a B2C channel. To do this, Hummel had to re-organize and centralize, building new IT competence, governance and flexibility to transform into a multichannel retailer and, ultimately, become an omnichannel retailer.

In the following sections, we document how Hummel addressed the various challenges to implement this strategy. These included: How the company developed multiple B2C sales and marketing channels, and how the channels were integrated, to give consumers a coherent and meaningful experience wherever and whenever they met the Hummel brand and products.

4.1 Organizational Structure and Governance

Create a cross-functional omnichannel leadership team

When the board of Hummel decided to embark on a multichannel strategy in 2010, a Head of Digital was hired to lead the projects. Immediately following the formal approval of the strategy, a steering group consisting of the CEO, CMO, CFO, and Head of Digital, and eight cross-departmental project groups representing every department in the company were established. It was essential to create cross-functional teams and include all departments because the multichannel projects would affect everyone in the company. The success of the strategy would be dependent on the involvement of all departments and their commitment to the strategy. The CMO was happy that the top management had recognized that the company's website was not just a marketing tool but also a fundamental business opportunity:

"We have once and for all 'killed' the old silo policy about the web only being a marketing tool – the company's business card." (Hummel CMO)

In 2011, a digital department was created to run B2B and B2C ecommerce, social media and digital marketing and to coordinate the different multichannel projects. In 2013, a retail department was also created, responsible for physical stores, shop-in-shops and retail fittings. At the same time, the marketing department, responsible for brand and product images, and for catalogue and other print advertising, was tasked with the challenge of including online and retail channels in the brand positioning.

However, there was a lack of co-ordination and integration, with the marketing, digital and retail departments working in silos. This created daily tensions across a divide based on old and new marketing mindsets. At the same time, customers were increasingly crossing channels, interacting with and shopping with Hummel in various ways, from the existing B2B stores to the new B2C stores, and via social media. The existing silos and ways of working were undermining the execution of a seamless brand experience across channels. The CMO expressed it like this:

“There is still a lack of will and capacity, cross-departmental, in getting the entire business adapted for the full potential. So I can’t say, as the CMO, that I’m happy with where we are today. I’m happy with the competences and the technology. And I know that there is willingness in the organization. But there is inertia, a fear and a change management issue, which still implicates the speed with which we are executing. I’m confident that we are moving in the right direction, but I think that we should have been further along by now.” (Hummel CMO)

To support the seamless integration across channels, the marketing, digital and retail departments were merged at the beginning of 2015. Some employees were let go, omnichannel minded employees were promoted, and new omnichannel minded people were hired. The Head of Digital became Head of Marketing and Omnichannel to integrate channels and to promote a vision of ‘digital first’. The reason for thinking digital first, was not just for marketing purposes, but also for IT and data purposes, as it was clear that it was IT, data and digital devices that were the foundations for omnichannel retailing and were the glue between channels.

“In the future, we will not ever create campaigns, which are not online campaigns from the starting point. We are thinking omnichannel, but we will need to make campaigns which are digital – it would be foolish not to.” (Hummel CEO)

Integrate channels

For Hummel, the first steps in the channel integration program were evaluating and prioritizing channels, and then launching each channel. The first interactive B2C channel had been launched on Facebook in 2008. Subsequently, each Hummel country business unit launched its own local Hummel Facebook page. By 2012, Hummel’s brand presence on Facebook was inconsistent and lacked impact. Corporate governance was needed to set a consistent tone of voice and service standards. Internally at Hummel, this was referred to as creating ‘OBOV’ (One Brand One Voice). To achieve OBOV, a technical mechanism was required to merge the various Hummel Facebook pages into a “Global page” under the control of Hummel Corporate. The CMO commented on the value of OBOV for Hummel:

“OBOV is a question of standardizing versus complicating things. We seek synergies, efficiency and effectiveness through tools, processes, brand expression, products, campaigns and so on. OBOV is our most important frame of understanding how to service our markets and customers. It has become a culture, a way of thinking, so when one hear OBOV one knows ‘oh yes, we all need to do things more aligned.’”

(Hummel CMO)

The digital media with its inherent transparency motivated the first efforts to align Hummel internationally. A Digital Manual was created and published, listing a comprehensive set of standards and guidelines. It described the core values, target customer segments and standards for the use of Hummel’s brand image online. This was updated biannually. It quickly became apparent that the Digital Manual could also be used to select partners who would strengthen the brand by adhering to the corporate guidelines. The Export Manager, who was responsible for selecting and managing local Hummel partners, explained this:

“We need to be the ones that control the brand and control what we want to be - with an understanding for market differences. Armed with our digital guidelines we can say no to the small distributors who won't do anything good for the brand. They would hurt the brand if they didn't follow the guidelines that we have. So the digital guidelines are going to be a really important tool for us in controlling and selecting who we want to deal with.”

(Hummel Export Manager)

In 2012, to further strengthen an aligned web presence, Hummel launched its first global website with integrated Facebook, Instagram, YouTube and Twitter feeds. By integrating channels the need for coherence became even more apparent. Further technical features were also developed to support this, including a What You See Is What You Get (WYSIWYG) editor for the global website, enabling the manager in each country with web responsibility to upload local stories, events and promotions, and to select the social media feeds to support each post. The CMO commented on this, saying:

“The website is the most important path to achieving brand alignment and availability for Hummel. And most important because it is accessible 24/7 for all geographies, all ages, all nationalities, and it is, across all this, a place where we can publish as many stories as Hummel has. And we have many stories, as we are a storytelling brand.” (Hummel CMO)

Hummel’s largest channel, in terms of turnover, is still the B2B channel. So, it is important to support and collaborate with the B2B partners to ensure an aligned brand and product message between the B2B channel and all other channels. Apart from sharing the newly created B2C content and product data, including retail fittings, product and lifestyle images, sales descriptions, size guides, and customer comments, Hummel also developed competitions, events and partner programs in collaboration with B2B customers. Finally, to commit to supporting the B2B customer and to ensure better control with and standards for selling and marketing Hummel products, the Online Retail Guidelines were developed and introduced. They included standards for servicing customers, for assortments, for the use of logo, images and brand text, and use of Adwords and domain names.

With the new B2C business strategically positioned to support the existing B2B business, Hummel addressed the threat of cannibalization. The initial solution for this was for the company not to fully implement the omnichannel strategy and structure, where all channels are integrated and sales are pushed through the channels that best serve the end-consumer. Instead, it treated B2B and B2C as two groupings with a strong omnichannel layer to support each other. This meant that the B2C channels did not mount aggressive promotions or visible sales discounts because that would upset the B2B customers, who still accounted for more than 95% of the business. Instead, Hummel focused on developing the central systems and internal capabilities to service end-consumers, and to improve customer experience across channels. In 2011, the CEO expressed it in this way:

“We need to focus on our own operations first. We need to have the central structure in place first, make it really cool.” (Hummel CEO)

In 2013, he continued to focus on this issue, saying:

“Where before we said, that we just needed the systems to work, I think that, as soon as we have the logistical setup, we need to offer something so that people can say, it actually pays off going there to have a look.” (Hummel CEO)

The CEO led the development of the omnichannel vision. It was agreed that the ability to offer various combinations of purchases, pick-up or delivery, and returns, was critical. Supported by new technology integrations, Hummel built the capabilities to fulfill many of these offerings, including: Buy online – home delivery (all B2C customers); buy online – pick up in store for B2C stores integrated with the Hummel website; buy online – return in store (for B2C stores integrated with the Hummel website); go to store – buy online in partner stores with in-store shop-in-shop. As yet, Hummel cannot yet fulfill: Buy online (B2C ecommerce) – return in Intersport stores (a B2B customer); and buy in store – return to online store. For this to happen, a closer collaboration between B2B and B2C business would have to be established. This is not yet viable due to the low volume of the B2C sales and the continued priority of the B2B business. However, the CEO recognized that the next step was to resolve the remaining fulfillment challenges:

“Now the systems work, I think that we need logistics in place. It is not in place today for large-scale ecommerce, but we can make it work for now. If it were anything like normal ecommerce volumes our logistics would collapse. It’s a bit like an elephant in a porcelain shop. It can work, but it is unstable.” (Hummel CEO)

The numerous variations for omnichannel shopping are illustrated in Figure 2 below. The figure shows how the customer, from the left hand side, has several browsing, buying, ship to, return and after sales options. The options can be fulfilled online (via brand web, store web, shop-in-shop, pure players, multibrand) or offline (via own shops, franchise, shop-in-shop, and multibrand retailer).

4.2 Strategic IT Competence

Harnessing the power of data and analytics

Hummel used analytics to track when customers began to migrate to mobile devices. At the beginning of 2013, when the data showed an increasing trend for mobile visits, it was decided that the trigger point for developing a new support system would be when 7% of visitors accessed the website from a mobile device. At that time, Hummel would develop a dedicated mobile version of its website. The intention was to launch the new mobile website before mobiles reached 10% of total website visitors. In 2014, the percentage of mobile visitors had grown to 25%, with tablets 15% and desktop 61%. The percentage of ecommerce conversions across devices was 13% on mobiles, 15% on tablets and 72% on desktops. The ecommerce channel was on a strong growth curve.

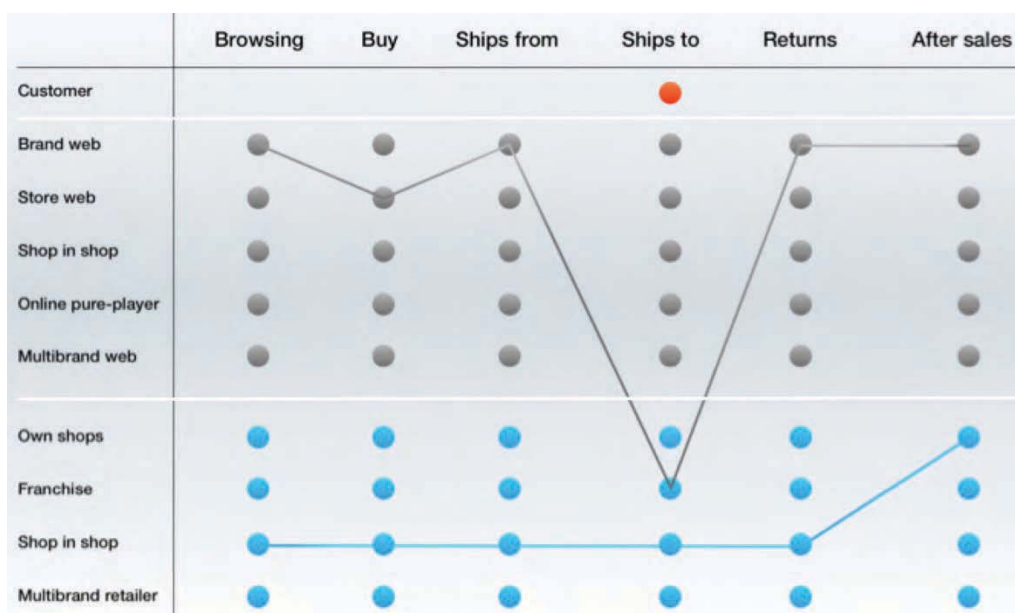


Figure 2 Purchase Journeys in Omnichannel

Two dimensions of the omnichannel data management proved to be problematic. One was how to link store sales data with ecommerce sales data. The stores used many different till systems across the 40 countries. In addition, Hummel did not own many of its stores. So, while data aggregation was possible, data integration was not.

The other challenge was to follow each customer across channels and to build a profile of the customer across all channels. While Hummel could aggregate data from all channels on

dashboards, it could not follow the individual customer from print advertising to stores, from stores to social media and to ecommerce, and back to stores. The technology did not yet exist. However, it was a top management strategic intention to own the customer contact:

“I have a dream, which is not fulfilled yet, of us going to market every season with one message, which covers everything.” (Hummel CEO)

“I wish to be able to say, in two years from now, “We own the consumer contact now!””
(Hummel CMO)

Leverage IT to deliver a seamless shopping experience

Within the above constraints, Hummel strived towards developing a unified view of the consumer to offer a better experience and service, and more targeted messages and products. Google analytics, Facebook analytics, Instagram analytics, newsletter analytics, customer clubs, ecommerce analytics, and retail analytics, increasingly enabled those improvements.

By 2014, Hummel had access to data and some analytical tools. The challenge was to integrate and manage the new big data set. Previously, the company had handled data from thousands of B2B customers. Its systems could not manage data from millions of end-consumers. Hummel began a search for a system that could aggregate the end-consumer data and provide a customer-centric view of the business.

“We are actually just about to taste the [omnichannel] experience. Not just delivering the system, but also deploying it. In principle we could get data from everywhere. When it is digital it gets more factual. The market is judging us real-time. Before it was just based on [our own]sensing.” (Hummel CSO)

Consider three examples of how Hummel leveraged technology to present a seamless shopping experience. First, to create a seamless experience across its website, newsletter subscribers and Facebook, a pixel was placed on Hummel’s website that followed visitors from the website back to Facebook. If a visitor had been looking at a sneaker at the website,

Facebook would place Hummel's sneaker ad on his Facebook wall with a buy button. This seamless experience from browsing on different channels to a direct buy opportunity created a high ecommerce conversion rate on Hummel's website compared to other advertising initiatives.

The second example is how Hummel leveraged technology to enable a seamless presence in the B2B owned space. Hummel developed a "Brand Button", which they installed on online retailers' webshops. It worked by placing a "more Hummel info" button next to Hummel products. When clicked it would open Brand Button as an iframe on top of the retailer's site displaying product specific data and brand content, which could be controlled by Hummel in real time.

The third example is how Hummel leveraged technology to capture presence in the indirect channels by placing order screens in B2B partner stores. This was done by developing a shop-in-shop website for the individual retailer with a customized front page and product lines. This shop-in-shop website could be displayed on computers, tablet and mobiles. It was placed as a Hummel designed tablet for use in the store. Customers could order Hummel products on the tablet in store and either pick up in store, or have their purchases delivered to their home or office. The CSO commented on the second order benefits from this strategy, specifically, the close relationship it forged with partners:

"The iPad shop-in-shop is a three times win. A win for the store, a win for the customer and a win for us. One thing is being strong through your partners, but it actually starts with ourselves. We ought to always have an interesting platform that explicates the full brand experience, which we can place in partner spaces." (Hummel CSO)

To develop an integrated view across channels, Hummel installed large visible dashboards, which aggregated data in real-time from all channels via APIs or plugins. Hummel changed the dashboard view according to the strategic priorities, but always integrated Google analytics on hummel.net, B2C ecommerce sales, B2B ecommerce sales and visits, Store Finder clicks, Facebook, Instagram, YouTube, and the mobile app downloads. In this way, not only the digital

department but all members of the organization could obtain a visual overview of how Hummel performed in each channel.

Integrate new technologies around legacy IT systems

The ERP system at Hummel was referred to as the backbone of the company. So, it was natural to build the B2B ecommerce systems on top of the ERP system and later to integrate the B2C ecommerce system with the ERP system. However, it was quickly recognized that the omnichannel strategy required a large variety of integrated systems.

The new IT infrastructure had to be complex and dynamic. Integration with social media channels required frequent updates, as new platforms were introduced or third party platforms changed their integration mechanisms. Nevertheless, it became a standard at the company to carefully integrate new systems with the old legacy systems. The ERP system remained the heart of the complex omnichannel infrastructure. This was also the case, at the end of 2014, when it became evident, that the ERP system needed to have a major update due to the increasing demands from the omnichannel structure both internally at Hummel and externally from its B2B partners. The CEO explained the importance of connecting the digital world with the ERP system:

“Having built an option to work omnichannel, we have also in a technical sense built an IT structure now, which enables us to do not only B2C and B2B and online handling, but the whole data handling, which is of eminent importance. So I think, that it is only fair to say that we are putting a lot of emphasis on the IT structure of the business. And coming from a system of Navision, where we prior to this project had no connection whatsoever with the digital world, it is now quite closely connected. And going forward, one of the top priorities we have is to make this whole digital and IT structure work together.”

(Hummel CEO)

End-consumer data became increasingly in demand as Hummel began to communicate with and sell directly to consumers. Hummel’s B2B systems could not cope with the new rich data, including sales descriptions, images, videos, 3D animations, customer ratings, comments and

user-generated images. Hummel had to develop a product information management system (PIM), in collaboration with its IT vendor, which could handle and maintain the rich product data. Following the standard protocol, the PIM system was carefully integrated with the ERP system.

However, Hummel increasingly came to recognize that the management structure was incomplete. A new position was required to manage the exponentially growing volume of consumer friendly product data. The IT department was responsible for the systems and the Digital department was responsible for the interfaces and consumer contact. No one was responsible for masterdata and data management. Initially this was solved by appointing a cross functional group to manage and control the demands for data. Soon, it was accepted that Hummel must appoint one or more full-time managers responsible for data management. The Board endorsed this in 2014.

“Ownership of data needs to be placed in the organization. We have discussed where the ownership should sit and have defined that it is not suitable in the Digital department or in the IT department as they are structured today. Instead, we propose to create a new cross-functional project group with a fulltime project leader and manager.” (Proposal from Head of Digital and IT Manager to the Board)

4.3 Flexibility

The need for IT flexibility

When Hummel entered the B2C world and interacted directly with end-consumers in 2010, it quickly became apparent that the company had to match the customers’ pace of change and always be present on customers’ devices and social media platforms. This ‘speed to customer’ required flexible IT systems and IT infrastructure, and an agile development methodology to support any unexpected trends in social media.

One way to achieve this was to continuously be present on social media platforms, and to secure and establish an official company profile on every new platform. The social media team could then assess the uptake of the new platform. If the following gained mass, the team

would decide when and how to integrate the platform into both the B2C system infrastructure and into the weekly marketing campaign plan. The CMO explained the importance of this strategy:

“As the CMO, social media means a lot to me. One, because I know that consumer behavior and purchase patterns have become more digital. Two, because internally it helps us to develop an on-brand expression in all our markets with all our partners. It is valuable to us, as it gives us real time insights into consumer behavior, reception of products, campaigns and sponsorships. We could buy expensive analysis from research institutes, or we could do what is far more effective, which use Facebook. So social media is absolutely contributing to the business, it’s not just a communication channel. It helps qualify my decisions for a number of things.” (Hummel CMO)

Social media integration

The B2C website was developed with flexibility as a major requirement. The platform must be able to integrate with the current and future unknown social media platforms. Initially, the website was launched with real-time integration with Facebook, Twitter, YouTube and Instagram. However, after two years, it was evident that Twitter was not relevant for the Hummel community. There were few Hummel Twitter followers compared to Facebook followers. Therefore, the Twitter integration was decommissioned.

In contrast, Instagram grew and became highly relevant for Hummel. So much so, that the new Hummelkids.com website was launched at the end of 2014 with a live Instagram feed for the hashtag #hummelkids to show real Hummel kids in action. The back-end mechanics of this was handled through the customized B2C PIM system, which pulled in the Instagram images via an API. These images could be published on the B2C website when a member of staff had approved the image by simply ticking it off in the system.

Separate and flexible B2C systems

The social media integrations did not affect the back-end ERP system because the front-end B2C and back-end B2B systems were kept separate (see Figure 3). This separation also meant

that Hummel could launch multiple B2C ecommerce websites and shop-in-shops without affecting the back-end systems. There was one core B2C ecommerce shop system, which was integrated with the ERP system, and which could host an unlimited number of ecommerce websites.

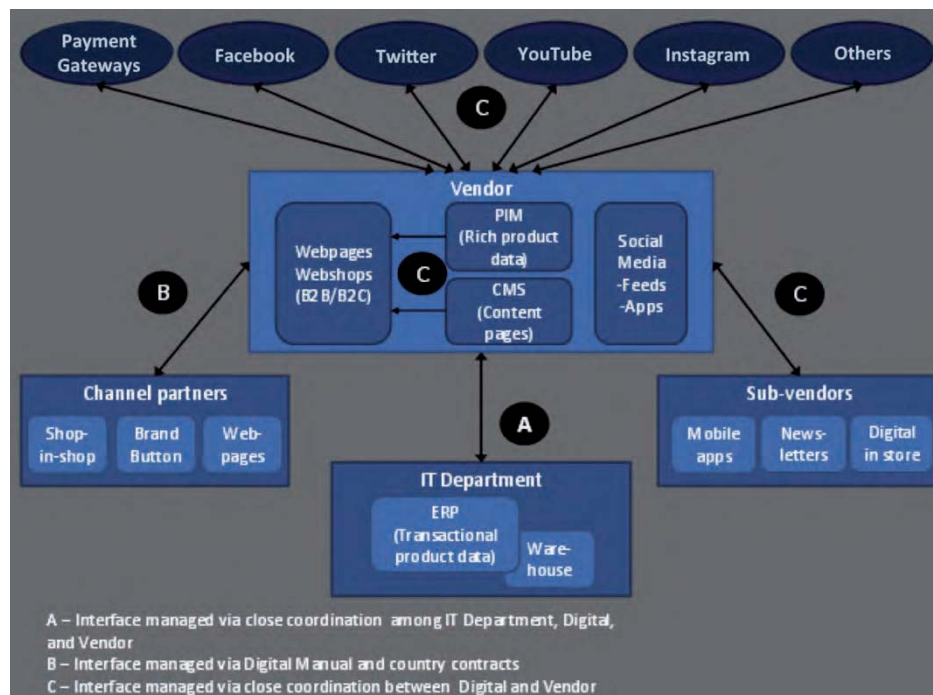


Figure 3 Hummel's Emerging IT and Data Infrastructure
Source: Hansen and Sia (2015, p. 20)

An example of this flexibility in integrating with social media is the ecommerce shop-in-shop module. This was designed for maximum flexibility and speed to customer. A new ecommerce website with a unique domain, customized front page, campaign images and selection of product assortment, was launched in less than a day. In fact, it took less than one hour to set up the new ecommerce shop-in-shop in the B2C back-end.

By the end of 2014, Hummel had implemented 23 individual ecommerce shop-in-shops for kids B2B retailers, one individual ecommerce shop-in-shop for a Hummel brand store with full product assortment, one individual ecommerce shop-in-shops for a fitness center with a training and fitness assortment, and two individual ecommerce shop-in-shops for promotional use. The last two included a pop up store for a special footwear promotion in conjunction with

a real life event in a mall, where shop assistants were carrying iPads showing the shop-in-shop. The CMO commented on this, saying:

“You would digitalize the physical retail space in order to sell more and in order to offer them a larger profit in the space. They have normal handling cost by selling a product, which they can’t show physically. But they get a cut of the sale without spending much time on it, without warehouse cost, shipping cost, returns and claims, etc. It’s a pure win for them. It is not just more sales, its larger profit and thereby a larger entitlement for our general physical store presence. For what it is worth it can also be differentiating from our competitors, who are still not in the market with screens in-store. And we can place ourselves in a category with brands like Nike and Adidas.” (Hummel CMO)

All these shop-in-shops had their individual statistics in the back-end of the core ecommerce shop system, which made it possible for the Ecommerce Coordinator to overview the sales and to allocate earnings to the relevant channel partners.

4.4 Omnichannel Brand Management

In 2010, Hummel commenced aligning its brand and product message online by gradually taking control of all Hummel websites and Facebook accounts across the 40 countries. The company introduced guidelines for use of the brand on social media, newsletters, Adwords, and for online sales on different platforms in 2012. While these guidelines, policies and contracts were paramount for aligning and digitalizing the brand, Hummel believed that the best way to enforce them was to produce strong standards and good quality material to entice partners to use Hummel HQ materials instead of using their own. With this conviction, Hummel Corporate was re-structured to be responsible for brand management, creating marketing material, and setting the global policy guidelines with which the marketing manager responsible for each country must comply.

The channel mix was also re-aligned when Hummel Corporate began setting guidelines for when and how channels should be launched. Initially, Facebook was the focal social media channel for Hummel, and each country was encouraged to operate a local Facebook page

under the Hummel's global pages umbrella. For example, the local pages provided local news and services for customers in their local language. To be delegated this option, countries had to prove that they could post a minimum three times a week, execute the global posts and competitions in local language, and respond to customers within 24 hours. If they could not comply, the corporate social media manager closed down their account. In contrast, if they did it well, and were skilled in servicing and delighting consumers, Hummel Corporate provided an advertising budget for their local pages.

When a new channel emerged, Hummel Corporate developed guidelines for when and how it should be adopted. As an example, when Instagram became an important platform for brands, corporate developed guidelines and cases for the use of Instagram with the countries, including profile name, logo, posts with the purpose of showing instant Hummel moments, and hashtag #hummel and #hummelsport. For partner businesses, the guidelines covered how sponsorship clubs and ambassadors should post new products in use, and how to link to live games with the hashtags. For employees, for example, the guidelines specify that they should use only hashtag pictures when they are wearing Hummel products and, if there is a visible logo, the pictures should be appropriate for the Hummel Character Wall, a large screen showcasing all #hummelsport images in real-time, which is posted in various locations around the world.

When the structure for and control over channels had been implemented, it was easier to align and implement the annual yearly marketing and communication plan. Each week, Hummel Corporate launched a new theme or campaign with customized content and images for each channel, including all online and offline channels. This was shared with the countries in advance, so that it could be executed in all channels at the same time. As the CEO noted:

"Looking at brand message alignment, I think that online is the area that has developed the most in the company, coming from a completely scattered and random picture, depending on the country, to having a common platform. It is not completely identical for all markets, and perhaps it shouldn't be, but the basic structure for all our large interesting markets is now the same – for the first time ever." (Hummel CEO)

In addition, it was important for the company to involve end-consumers and to show the Hummel products in action on real life people. So, customers were encouraged to share their Hummel experiences on the different platforms. Some campaigns were launched and driven by bloggers and consumers. Authenticity, 'virtual word of mouth' and ambassador appearances are more important to the Hummel marketing strategy than are TV commercials and print advertising. In this way, Hummel has begun to co-create the brand with its ambassadors, fans and consumers.

Overall, the brand is now accessible and transparent to consumers. This required Hummel to develop a clearly defined brand strategy and position. As the Hummel community grew from 13.000 members in 2010 to 1,5 million members at the end of 2014, the data, analytics and insights gathered from the community's interaction with the brand enabled Hummel to review and correct the brand positioning. For example, when Hummel launched "Karma" as the core brand promise in 2012, analytics showed that less than 2% of the website visitors clicked on the Karma related pages. Similarly, there were few likes on "Karma" posts on social media. Reacting to these findings, Hummel refined and repositioned the brand message strategy. In this way, the Hummel community forced the brand managers to clarify and effectively to re-launch the brand message in a more consumer relevant and friendly form.

5. ANALYSIS and DISCUSSION

The case study presents four findings with major implications for theory and practice as retailers replace a multichannel strategy with an omnichannel strategy. First, the transition requires the development of a brand strategy for omnichannel retailing. The solution presented here extends the Keller (2010) framework for a multichannel retailer to an omnichannel retailer implementing a global brand strategy.

Second, the transition from multichannel to omnichannel retailing requires a fundamental change in the organizational structure. In a multichannel organization, each channel operates independently. In contrast, the omnichannel organization provides a seamless brand and

shopping experience as illustrated by the example of the young girl in the introduction to this paper.

This strategy requires that the governance structure, the assignment of channel management decision rights, is centralized and owned by the corporate level of Hummel. In this way, customers become customers of Hummel and not of one of its channels. Independent country-based channels, which presented variations on the Hummel brand, are replaced by interdependent channels, which present a consistent global brand presence across countries. The new governance structure leverages the global brand to create value. As Prahalad and Hamel (1990) argue: “Think globally and act locally”.

Third, to leverage its global brand, Hummel is developing IT capabilities to support a seamless shopping experience. Recall the example of the young girl from the introduction to this paper. She does not think about the channel by which she interacts with the brand. Rather, she views browsing, shopping and interacting, as her aggregate experience with the brand. This required new IT capabilities to integrate customer social media technologies and Hummel channel technologies. It also required new business marketing capabilities that, when aligned with the new IT capabilities, created new sustainable strategic competences (Hansen et al. 2015).

Fourth, changes in customer social media capabilities drive the required new IT capabilities. Critically, these changes are neither under the control of Hummel nor are they strategic choices made by Hummel. Instead, they are a function of trends in social media about which Hummel initially had limited exposure and knowledge. In addition, Hummel’s core customers are young, active and ‘cool’. They quickly adopt the latest technology, social media platforms and trends.

So, to be competitive, Hummel must match their customers’ pace of technological change and always be present on customer devices and social media platforms. Indeed, Hummel must be more than present on those platforms. It must interact with customers to provide seamless communication and shopping across channels. To do this, Hummel must continuously be up-to-date in terms of technology and social media presence. This ‘speed to customer’ rather than

the traditional 'speed to market' requires a flexible IT platform and agile development methodologies to support unexpected shifts in social media.

The three mechanisms, IT governance, developing novel IT strategic competences in which business capabilities leverage IT capabilities, and a flexible IT platform and agile developmental methodologies, are three of the four profit drivers in Makadok's (2010; 2011) theory of profit. Reynolds and Yetton (2015) present a theoretical model of how these three profit drivers create value when business strategy and IT strategy are aligned in MBOs. Here, to explain alignment in an omnichannel strategy, we relax the assumption of SBU independence in the Reynolds and Yetton (2015) model.

The four findings help to explain Hummel's success in the emergent omnichannel sports fashion market. In combination, they explain how alignment between an omnichannel strategy, the extended Keller model, and an IT strategy, based on an extension off the Reynolds and Yetton (2015) model, creates value for Hummel. Before discussing the implications for theory and practice, we review four limitations to the findings.

5.1 Limitations

All research is subject to limitations. Four are reviewed here. First, the omnichannel implementation cycle at Hummel is not fully complete. Therefore, this research is still a work in progress. The cycle is expected to be completed within eighteen months. During this period, the author will be a senior executive with responsibility to complete the implementation of the IT support for the omnichannel strategy, with unlimited access to the relevant data. A paper for publication will then be prepared.

However, the four findings presented above are not threatened by the implementation cycle not yet being complete. On completion of the cycle, there are likely to be additional findings and insights. These are likely to contribute to our understanding of how flexibility contributes to Hummel's performance and the challenges involved in sustaining 'speed to customer' response.

Second, the findings reported here are based on a single case study. Generalizations are subject to a number of validity threats. However, in a new domain with very limited theory, Yin (2003) recommends the adoption of case analysis to develop initial contributions to theory. Certainly, the findings reported above are similar to those reported for another recognized successful omnichannel transformation case, which is the British fashion brand Burberry (see, for example, (Webcredible 2012; Westerman et al. 2014) . Subsequent research should explore the domains to which these findings can be generalized.

Third, in case study research, the researcher is not an independent observer (Eisenhardt 1989). Instead, the researcher is an actor in the context. This is particularly the case in action research. Therefore, there is a potential internal validity threat to the findings due to the researcher's potentially biased perception of the outcomes.

To mitigate this threat, the researcher systematically documented all evidence to ensure that the investigation was scientifically valid with the purpose of generalizing to theoretical propositions for the particular type of problems (Yin 2003). Based on that evidence, the researcher developed a narrative that included the complexities and contradictions of real life (Flyvbjerg 2012). See the Methodology section above for a detailed description. In addition, the top team at Hummel has reviewed and endorses the findings. Subsequent research adopting different methodologies will resolve this potential validity threat.

Fourth, the study is limited to the fashion industry. While the fashion industry is characterized by its high touch and emotional connotations (Kapferer 2008), the impact of ecommerce and social media is not exclusive to this industry. The entire retail sector is experiencing the same external threats, and is now starting to innovate with technologies such as social media, mobility and analytics, and moving towards omnichannel retailing. Therefore, we believe that the strategic framework and findings presented in this paper and the collective practical implications are useful for and transferable to other retail sectors, including the lifestyle, auto and leisure industries.

5.2 Implication for Theory

Having repositioned itself from being a multichannel retailer to becoming an omnichannel retailer, Hummel has changed how it competes. In a multichannel organization, value is created within each channel. In the omnichannel organization, the independent channels of the multichannel retailer are integrated and brand-based value is created at the corporate level. We begin by analyzing how these changes require that the Keller (2010) model of multichannel brand management must be extended when applied as a component of an omnichannel brand management strategy.

To implement an omnichannel strategy, the decision rights over channel IT management are centralized. In this context, the strategic benefit from centralization is not cost reduction from standardization as argued by Hodgkinson (1996). Instead, the benefit is from strengthening brand control by aligning business and IT strategies (Keller 2010; Reynolds and Yetton 2015; Zhang et al. 2010).

In the short run, Hummel loses the benefits from its previous focus on channel sales and revenue within a B2B strategy. In the medium to long term, the brand will be stronger and the sum of the channels will be greater than the sum of each individual channel in the multichannel strategy (Keller 2010; Zhang et al. 2010). This shift changes the way Hummel competes by changing the requirements for the three drivers of profit, governance, competence and flexibility (see Reynolds and Yetton 2015).

Specifically, the change in governance challenges the boundary conditions of the Reynolds and Yetton (2015) alignment model. Extending that model to include interdependences among business units in this case, interdependences across channels has potential implications for business and IT strategic alignment in platform-based organizations. Below, we discuss the contributions to theory under the four headings of the Keller (2010) theory of multichannel brand management, organization structure and governance, strategic IT-based competences, and IT-based flexibility. We then summarize the research contribution from this paper.

Before we do that, we consider an additional finding not listed above. Hummel was successful in implementing its multichannel strategy. So, we apply the Reynolds and Yetton (2015) model to analyze that success. This shows that properties of that strategy and its implementation, which were changed to implement the omnichannel strategy, were critical factors in the success of its multichannel strategy.

5.2.1 Hummel: A Successful Multichannel Strategy

Interpreting the country channels in the Hummel multichannel strategy as strategic business units (SBUs), the Hummel IT strategy and structure are consistent with those recommended by the Reynolds and Yetton (2015) alignment model. Recall from the background theory section above, each SBU's IT application portfolio should be independent of other SBU IT portfolios to support the unique way in which each SBU competes in its own market. Shared IT-based services should be supplied by the corporate IT platform.

The case study above reports that: 'The emergence of the Internet highlighted the scattered and unaligned brand presence across markets and channels. Some SBUs, in markets like Korea, sold exclusively sport products through Hummel concept stores. Turkey and France sold fashion products through a mix of channels.' These variations are a threat to a strong global brand strategy but are consistent with a multichannel or multi-business strategy in which the governance structure delegates the business decision rights, including how they compete in their own market, to the individual SBUs. Consistent with this strategy autonomy, IT strategy is aligned to these differences in the business models across countries. For example, each channel developed its own Facebook page and brand presence, which was the source of the '... unaligned brand presence across markets and channels'.

The corporate platform, the ERP system, was limited to managing financials, production and logistics. Even this limited corporate level of control was not universally applied: 'Holland sold sport products, which they produced themselves under license through B2B channels.' This minimized the IT corporate overheads in a business model where value was primarily created at the SBU level.

The different IT capabilities in each country-based channel were leveraged by different country-based business capabilities to create the different competences required to compete in each country. The success of this strategy is consistent with the predictions of the Reynolds and Yetton (2015) model, providing empirical evidence to validate their theoretical model. In addition, this secondary analysis shows how the governance that is appropriate for one strategy, a multichannel strategy, can be inappropriate for another, an omnichannel strategy, which includes the creation of 'OBOV'.

5.2.2 Omnichannel Brand Management

When applying the Keller (2010) framework to Hummel (see Figure 1), it shows how Hummel as a brand owner would reach the end-consumer through direct sales and marketing channels (e.g., through new consumer channels, including Facebook, newsletters, ecommerce, stores etc.) or through indirect sales and marketing channels (e.g., through B2B business). However, the Keller framework does not distinguish clearly between online and offline channel choices, or show where the boundaries between on and offline channels are becoming increasingly blurred due to new technology advancements with omnichannel features (e.g., augmented reality, tablets in store, holograms, etc.). Most importantly, the model does not include the links across channels, which are the critical difference between a multichannel strategy and an omnichannel strategy.

Adapting the Keller (2010) marketing integration framework to incorporate the Hummel features above, we extend the framework to model an omnichannel strategy (see Figure 4). Furthermore, we found it useful to show the company's dependence on each area as percentages of total turnover in the direct and indirect sales channels. We also present the percentages in the personal and mass communication channels. These are proxies for the share of impressions/eyeballs reached.

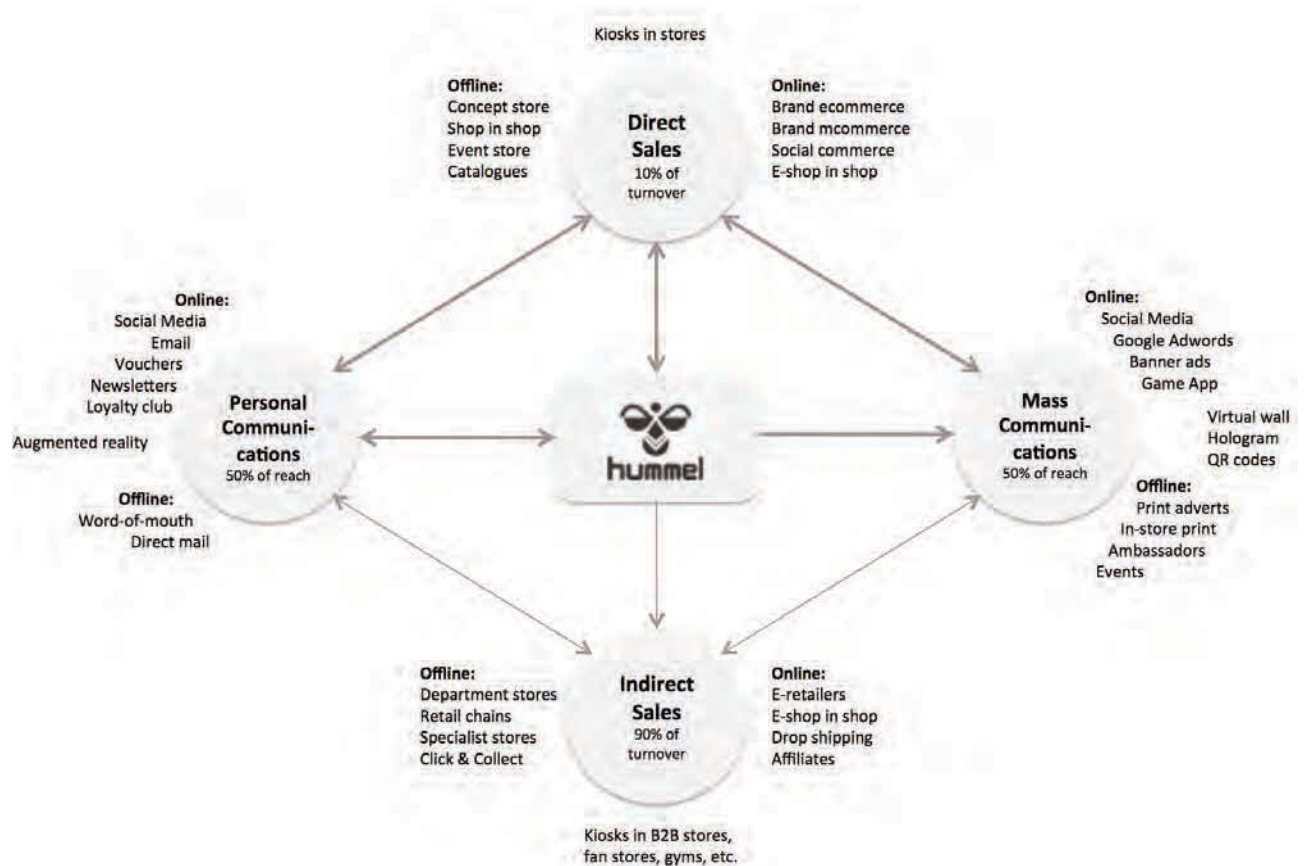


Figure 4 Hummel's Omnichannel Characteristics

Figure 5 gives an overview of the omnichannel environment in which Hummel operates. Generalizing Hummel's experience, we highlight four aspects of omnichannel management strategy to offer a brand-based seamless communication and shopping experience.

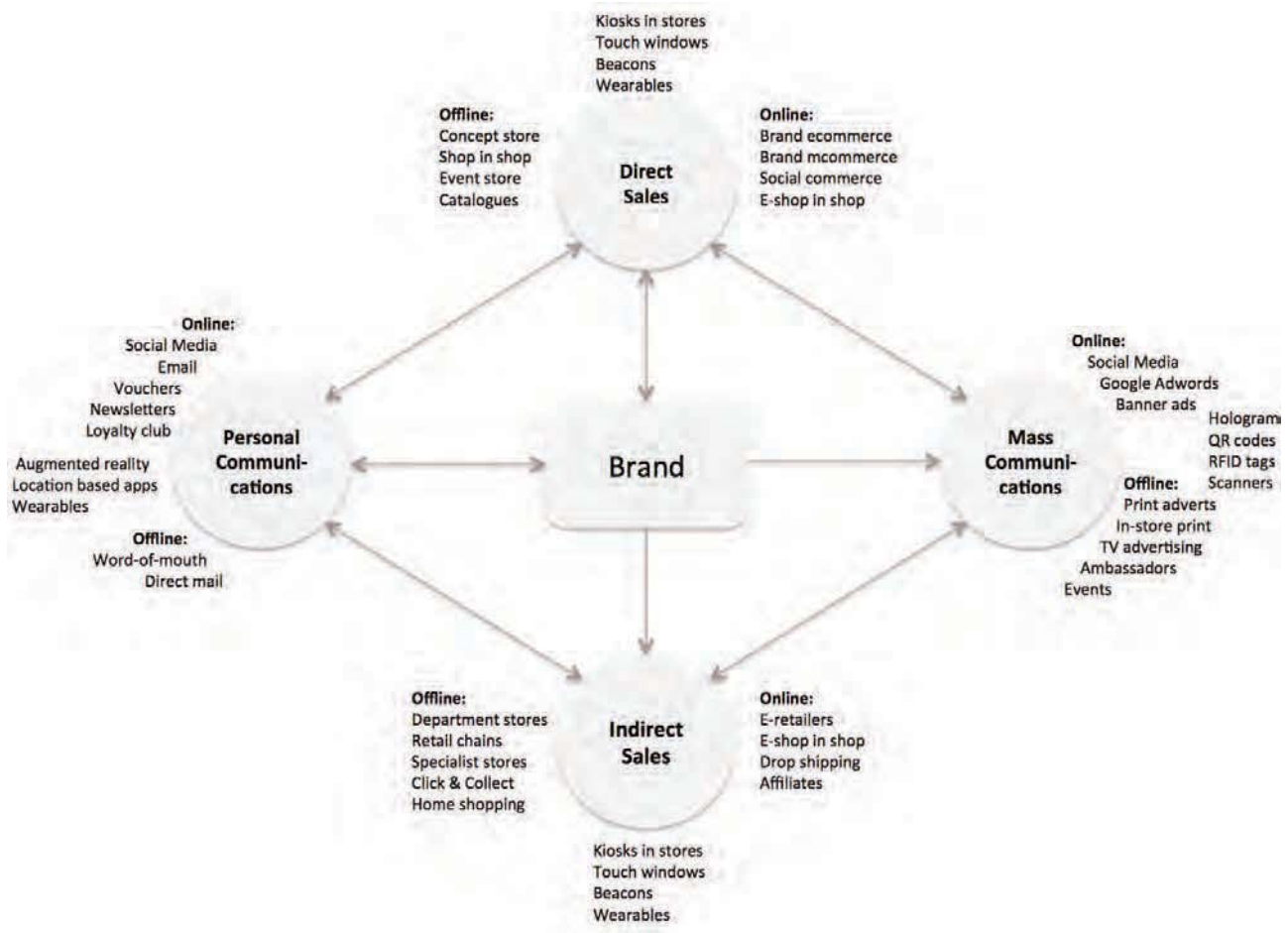


Figure 5 Omnichannel Characteristics

First, we relax the assumptions of channel independence with channels operating as separate business units. In transforming to the omnichannel structure, the customer ownership, decision rights and value creation are reassigned from the channels to the corporate center. This change is examined in more detail below in our analysis of how governance creates value. Figure 5 presents the Omnichannel Characteristics framework, showing how the corporate brand affects the end-consumer with the brand located in the middle of the Figure, interacting with partners and consumers. As described by Keller (2010), this can be enacted through direct sales and marketing channels or through indirect sales and marketing channels, but with those mechanisms subject to centralized brand control.

Second, to have an overview of the channels to be integrated, Figure 5 shows the online and offline channel choices, and the channels where lines between online and offline are becoming blurred due to technology advancements with omnichannel features, including, for example,

augmented reality, wearables including Google Glass, location based apps, and tablets in store. In addition, arrows are included in the model to identify the important interrelationship between the channels, and the brand owner's influence on those relationships.

Third, offering customers a coherent and seamless communication and shopping experience compared with a multichannel shopping experience requires that the organizational structure described above is aligned with both the omnichannel business and IT strategies. The new IT structure is centralized as explained in the organization structure and governance section below.

Fourth, while omnichannel retailing involves a fundamental shift in how retailers compete, we recognize that it will still essentially be a multichannel world but with a strong omnichannel overlay. While the brand is managed centrally, channel managers will still focus on their individual channels. An omnichannel strategy will be one of the critical strategic differences between successful and unsuccessful retailers in the world driven by the fast, ever-changing consumer behavior and social media technology.

5.2.3 IT Governance structure

The transition from multichannel to omnichannel retailing involves a fundamental change in the governance structure. In the multichannel organization, each channel operated independently to create value. Each channel manager was effectively running an independent business unit. In contrast, in the omnichannel organization, the channels are highly interdependent in how they create value. *"We have killed the old silo policy about the web."* (Hummel CMO).

Restructuring from a multichannel strategy to an omnichannel strategy is not similar to adding more channels. Instead, it involves designing an organization structure to deliver a seamless brand and shopping experience. To achieve this, the new governance structure centralizes the decision rights over brand management to implement a strong global brand strategy. In 2013, the existing marketing department was 'tasked with the challenge of including online and retail channels in the brand positioning'.

This created tensions between the marketing department and the digital department, set up in 2011 to manage digital marketing and ecommerce, and the retail department set up in 2013. 'This created daily tensions across a divide based on old and new marketing mindsets.' To resolve this weakness in the governance structure, the three departments were merged in 2015. 'The Head of Digital became Head of Marketing and Omnichannel to integrate channels and to promote a vision of 'digital first'.' In this way, Hummel centralized all decision rights over channels, including channel IT that supported the global brand strategy. *"The website is the most important path to achieving brand alignment and availability for Hummel"* (Hummel CMO).

The decision in 2012 to launch Hummel's first global website, integrating Facebook, Instagram, YouTube and Twitter feeds, identifies the limited residual decision rights retained by the country managers. 'Further technical features were also developed ..., including a What You See Is What You Get (WYSIWYG) editor for the global website, enabling the manager in each country with web responsibility to upload local stories, events and promotions, and to select the social media feeds to support each post.'

These examples and others in the case findings above are consistent with the arguments underpinning the Reynolds and Yetton (2015) alignment model. Governance creates value by aligning business strategy and IT strategy within the corporate and/or business unit levels. This reduces transaction costs and agency problems.

Within the previous multichannel strategy, value was created by alignment between the business and IT strategies in each channel, which operated as a business unit. Within the omnichannel strategy, value is created by alignment at the corporate center. Traditionally, IT strategy is centralized as part of central IT shared services, with standardization realizing economies of scale (see, for example, (Hodgkinson 1996). In contrast here, decision rights over channel resources, including IT resources, are centralized to strengthen the, global brand strategy (Keller 2010; Reynolds and Yetton 2015; Zhang et al. 2010).

However, the case findings also report an apparent major inconsistency between the Hummel case experience and the Reynolds and Yetton (2015) model. The model assumes that within a multi-business strategy, each SBU competes in its own market independently of the other SBUs. Within an omnichannel strategy, the channels operate interdependently (see, for example, the multiple linkages between channels in Figure 5). We return to this issue below in the discussion of flexibility to show that the effects on value creation of interdependences among channels are asymmetric between multi-business organizations and omnichannel organizations. This extends the Reynolds and Yetton (2015) model to explain the effects of governance on value creation in omnichannel strategies.

5.2.4 Strategic competences

Governance essentially determines where, at the corporate center or at the business unit level, value is created. However, the alignment between business and IT capabilities, which create unique IT-based competences, occurs at the same level. Within a level, alignment creates competences when business capabilities leverage IT capabilities to create novel competences.

For Hummel, as the CEO said in 2010: "*... we needed capacity and brainpower in this area [digital]. That was the only knowledge I really had.*" The capabilities to run the multichannel strategy had no overlap with the digital marketing capabilities and IT integration capabilities in social media required to implement the omnichannel strategy. Certainly, Hummel did not have the capabilities to run the analytics that are critical to the omnichannel strategy.

Hansen et al. (2015) describe the dynamic development of competences at Hummel. Here, the concern is with the level of those competences. When the marketing, digital and retail departments were merged in 2015, 'some employees were let go, omnichannel minded employees were promoted and omnichannel minded employees were hired. The Head of Digital became the head of Marketing and Omnichannel.'

Hummel began to build the business and IT capabilities required by the omnichannel strategy. Each step forward in the implementation required new capabilities. When running the multichannel strategy, Hummel 'had handled data from thousands of B2B customers. The

systems could not manage data from millions of end-customers' in an omnichannel strategy. To manage the new Big Data sets, Hummel had to hire new data managers. So, at every step in the development of the omnichannel strategy described in the case study above, Hummel had to acquire digital business and IT integration capabilities.

An additional challenge is that the newly recruited IT resources know little about an omnichannel retail strategy, and the newly recruited retail resources know little about interpreting Google analytics, other online feeds and the use of real time dashboards. Critically, value is not created by recruiting and developing the business and IT resources but by the new business resources leveraging the new IT resources to create competences (Reynolds and Yetton 2015). Furthermore, this occurs in a dynamic environment in which the resources and their interactions change quickly.

5.2.5 Flexibility

In an omnichannel strategy, the driving force for IT-based change is the dynamic customer technology sets and social media platforms. Customers' use of social media and ecommerce does not pause, let alone stand still for a while. Instead, it is constantly evolving. The central IT system therefore must be flexible.

Hence, the challenge is not about making the organization internally flexible as assumed in the Reynolds and Yetton model (2015). There the threat to performance is that the company implements IT upgrades and makes other IT-based changes, which reduce the IT flexibility over an investment cycle, increasing the cost and reducing the impact of the next innovation. Here, the argument is that the company needs the flexibility, not in terms of the investment cycles, but in terms of the flexibility to respond to unexpected innovations in mobile devices and/or social media.

Our findings above describe how the multichannel team (steering group) in Hummel came together to design the IT infrastructure for B2C ecommerce. This was mainly achieved by designing new separate systems for the B2C interfaces (e.g., B2C CMS and ecommerce shop system, B2C PIM system, apps and social media integrations), which were integrated with the

existing B2B back-end ERP system. However, after two years, it has become clear that the rapidly changing B2C omnichannel business has requirements with which the existing back-end cannot cope.

At the same time, the traditional B2B customers had also changed their data exchange requirements, as they became more integrated into the ecommerce business and the world of social media. As a consequence, Hummel has to rethink and rebuild its entire master data structure and supporting back-end systems. This is a major project, which is still in its initial phases. We speculate that future systems at Hummel and other retail companies will be highly modularized, so that the systems can be changed, recombined and reconfigured quickly to cope with changes in customer demands and business offers.

This raises a separate, but related, issue. Retail companies must to understand the trajectory of social media or they must build a very high level of potential flexibility into their IT platforms in order to compete in this new omnichannel world. We speculate that they will adopt a combination of the two.

The first choice, of understanding the trajectory of social media and the inherent changes in customer behavior patterns, is difficult, as there is no expertise, knowledge or judgment about how social media will to change. In its short life span, it has been dynamic and unpredictable.

The other choice, of building a high level of flexibility into the IT platforms, is expensive. However, the high level of flexibility can be achieved by either specifically developing the IT systems for the company or by accessing the systems from a standard supplier like SAP or Microsoft. In Hummel's case, the company bought in Microsoft Dynamics Navision, but will need to upgrade to a completely new version in the near future and buy in a PIM system. This is expensive both in terms of investment in the systems and investment in external and internal resources to implement the system.

5.3 Implications for Practice

The transition from a multichannel to omnichannel brand strategy raises a number of challenges for an organization. If developing the right model is difficult in theory, it is likely to be more difficult in practice. Five of the challenges are reviewed here: The transition is a revolution and not an evolution; there are major changes for existing staff with few winners and many losers; channel conflict has a significantly increased impact on organizational performance; new key performance indicators (KPIs) must be developed; and not all combinations across channels can be serviced. Hummel has experienced all of these challenges. To some extent, all are still a work in progress. As recognized in the Limitations section above, the implementation cycle is on-going.

First, the transition from a multichannel to an omnichannel strategy is a major strategic change without a proven model to copy. It is not about adding more channels, but about handling a lot more complexity to make a seamless world a successful business. The complexity includes building a new corporate IT platform to integrate the channels; implementing a new organizational structure and writing all the new job descriptions; recruiting new IT global brand management and marketing resources; and retraining and letting go of existing resources. These are all on the transition critical path with limited opportunities to mitigate the risks involved.

Second, the transition from value being created primarily in the individual channels through increased sales to value being created at the corporate level through global brand management and collaboration across channels has implications for the channel managers. Many will feel that they have lost their independence and been stripped of their power. Their expertise has not changed, but it does not have the same critical role in value creation in the new omnichannel business model as it did in the previous model.

In the transition, it is in the thinking global, where the opportunities are large. In the acting local, the opportunities are limited. The reverse was the case in the multichannel business model. The new organizational structure removes much of the discretion from channel managers, including their rights over IT decisions. Instead, the omnichannel organization

competes as a global brand. For channel managers, there will be only small variations in each country. In Hummel's case, lighter fabrics are used in southern Europe compared to Scandinavia, and sizing and colors are different in Asia compared to Europe.

In contrast, for the global brand and IT managers, the world is full of opportunities and the resources to exploit them. The global brand manager is king: The customer must have the same collective experience of the brand whether she gets off the plane in Seoul, Korea, and shops in the flagship store, shops online in Spain, or in a shop-in-shop in Denmark. The global IT platform manager is the architect of the new model. And, of course, the players in these roles are mostly new highly technically trained recruits with university degrees unlike many of the existing staff.

Third, because it is not possible to collapse and integrate channels in the short run, especially when a retail company is constrained by its legacy structures, channel conflicts occur. Customers judge a brand by their collective and holistic experience of all interactions with the brand (Kwon and Lennon 2009). They do not think about channels. However, the previously dominant physical store channel will naturally compete with online, mobile and future new channels.

Within a multichannel strategy, channel conflict identifies where the market segments underpinning the channel structure are not independent. Various solutions are available to resolve the conflict at an operational level (see, for example, (Avery et al. 2012; Riggins 2004; Van Bruggen et al. 2010). In an omnichannel strategy, channel conflict threatens collaboration across channels, which is a critical component of the strategy. Consequently, in a multichannel strategy, we remove the conflict. In an omnichannel strategy, we must embrace it, explore and define how to collaborate (Brynjolfsson et al. 2013). To enable this, the new IT platform must provide the transparency to identify the source of the conflict and the flexibility to support a collaborative solution, without increasing temporal misalignment.

Fourth, in a multichannel world, KPIs are structured around the performance of each channel. There is experience in the industry on how to do this. In contrast, in an omnichannel world, the

challenge is how to measure the contribution to performance of the interactions among the various channels. There is limited experience in the industry about how to do this.

Early solutions at Hummel were that sales assistants in stores would be rewarded for the sales they sent to the online channels and the online channel managers would be rewarded for the traffic they sent to the stores. While straightforward in theory, these benefits were difficult to measure in practice. Then, there was the added complication of how to account for returns.

Another solution could be that bonuses would be contingent on the value that the corporate brand creates compared with the value created by the channels, with the challenge of how to measure these values. At Hummel, the annual bonus payment is equal for all roles to minimize channel conflicts and support collaboration. For those who previously were paid high bonuses, this is frequently resented.

Over time, Hummel implemented evaluation and performance metrics for all communication channels. These were visible on real-time dashboards on the large screens at the head office, and were reported in detail once a month to the Board of Directors. This helped not only to gain understanding of the new digital channels, but also to infuse excitement about the growing impact of the consumer channels as Hummel grew its customer community from 13,000 members in 2010 to 1.5 million in 2014.

However, it was only when sales hit a significant amount (which was helped by a large gross margin when selling directly to consumers) that Hummel considered implementing sales performance cost controls and commissions. As an example, independent Hummel countries would pay for the development and operation of a local website and receive a share of the revenue from the ecommerce in their local territory. Another example is how the B2B partners are incentivized and rewarded for introducing customers to the iPad shop-in-shop. The incentive is higher than if the B2B partner purchased the product for the customer through the B2B platform. In this way, Hummel tried to manage the channel mix to give the end-consumer the best possible experience. Again, there is very limited experience in the industry on how to implement such a process.

Fifth, deliveries and returns of products purchased through the ecommerce channels were amongst the largest operational obstacles. Partly, this was because Hummel had to change from a B2B mindset to a B2C mindset in which Hummel itself had to service the contact with the end-consumer. For example, the warehouse systems were not set up to pack individual beautifully wrapped packages with custom notes and small gift-with-purchases for the end-consumers. Instead, it was set up for large pallet deliveries for the B2B customers. When additional B2C ecommerce channels and physical stores, directly and indirectly owned, were added to the channel mix, it became more complex and difficult to operate in an omnichannel manner. So, when Hummel next went out to tender for warehousing services, extensive requirements for B2C ecommerce services were included.

There are numerous potential combinations of purchases, pick-up or delivery, and returns, in an omnichannel strategy. Helped by technology integration, Hummel learned to fulfill many of these, including: Buy online – home delivery (all B2C customers); buy online – pick up in store for B2C stores integrated with the Hummel website; buy online – return in store (for B2C stores integrated with the Hummel website; go to store – buy online in partner stores with in-store shop-in-shop. However, Hummel cannot yet fulfill: Buy online (B2C ecommerce) – return in Intersport stores (a B2B customer); and buy in store – return to online store. In an omnichannel strategy that espouses a seamless shopping experience, the failure to support some patterns is frustrating for customers and threatens the espoused strategy.

The different shopping patterns also have the potential to create channel conflict. For example, Hummel initially developed a separate inventory management location for B2C ecommerce in the ERP system. However, it was realized later that this was too complex for the new business, as not all allocated inventory would be sold through the ecommerce channel. In addition, because the B2C ecommerce products were not stored separately from all other products in the warehouse, they were still physically available for other channels. After three seasons, it was decided to cease using the separate inventory management location. Instead, the inventory was treated as one entity available to all the channels. This created conflict

between channels, for example, the ecommerce channel would lose styles, which had suddenly all been purchased by a large sport chain.

In this and many other ways, Hummel has been on a steep learning curve to implement their omnichannel strategy, which has required strong and consistent top management support and involvement. In practice, the move from a multichannel strategy to an omnichannel strategy is a mixture of opportunities and problems. These have the potential to create conflict rather than collaboration, with significant winners and losers. Frequently, the winners will be the new recruits and not the long-term members of the organization. Hence, the strategic change is a major challenge in organizational transformation.

6. CONCLUSIONS

This paper poses two questions: What are the critical strategic differences between a multichannel and an omnichannel marketing strategy; and how do governance, competence and flexibility create value in omnichannel strategies? The contribution in response to the first question is an extension to the Keller (2010) model of brand management. This extension recognizes the critical effect of interactions among channels in an omnichannel strategy. The importance of this insight and contribution will increase with the increased use of mobile devices in the retail shopping experience.

The contribution in response to the second question is relevant to the general domain of platform organizations. The global brand retailer is one example of the general set of platform organizations. The dominant organizational form of the last thirty years has been the MBO. Moving decisions close to the customer creates value. The corporate center determines in what markets the SBUs compete and the level of services that they shared. IT services have been a critical component of those shared services. Reynolds and Yetton (2015) present a model of alignment for MBOs.

Increasingly, corporations are competing as platform organizations. The corporation rather than the SBU owns the customer. Value is created at the corporate level, rather than within

the lines of business, which are frequently interdependent. Examples include CISCO, Amazon and Google. The analysis above suggests how the Reynolds and Yetton (2015) model can be extended to model business and IT strategic alignment in these platform organizations, including Hummel and other omnichannel retailers.

REFERENCES

- Avery, J., T. Steenburgh, J. Deighton, and M. Caravella. 2012, "Adding Bricks to Clicks: Predicting the Patterns of Cross-Channel Elasticities Over Time," *Journal of Marketing* (76:3), pp. 96-111.
- Bang, Y., D. Lee, K. Han, M. Hwang, and J. Ahn. 2013, "Channel Capabilities, Product Characteristics, and the Impacts of Mobile Channel Introduction," *Journal of Management Information Systems* (30:2), pp. 101-126.
- Benbasat, I., D. K. Goldstein, and M. Mead. 1987, "The Case Research Strategy in Studies of Information Systems," *MIS Quarterly* (11:3), Sep., pp. 369-386.
- Bendoly, E., J. D. Blocher, K. M. Bretthauer, S. Krishnan, and M. Venkataramanan. 2005, "Online/in-Store Integration and Customer Retention," *Journal of Service Research* (7:4), pp. 313.
- Bergeron, F., L. Raymond, and S. Rivard. 2004, "Ideal Patterns of Strategic Alignment and Business Performance," *Information & Management* (41:8), pp. 1003-1020.
- Brynjolfsson, E., Y. J. Hu, and M. S. Rahman. 2013, "Competing in the Age of Omnichannel Retailing," *MIT Sloan Management Review* (54:4), pp. 23-29.
- Chan, Y. E., S. L. Huff, D. W. Barclay, and D. G. Copeland. 1997, "Business Strategic Orientation, Information Systems Strategic Orientation, and Strategic Alignment," *Information Systems Research* (8:2), pp. 125-150.
- Chan, Y. E., and B. H. Reich. 2007, "IT Alignment: What have we Learned?" *Journal of Information Technology* (22:4), pp. 297-315.
- Chatterjee, P. 2010, "Multiple-Channel and Cross-Channel Shopping Behavior: Role of Consumer Shopping Orientations," *Marketing Intelligence & Planning* (28:1), pp. 9-24.
- Chung, C., S. C. Chatterjee, and S. Sengupta. 2012, "Manufacturers' Reliance on Channel Intermediaries: Value Drivers in the Presence of a Direct Web Channel," *Industrial Marketing Management* (41:1), pp. 40-53.

- Croteau, A., and F. Bergeron. 2001, "An Information Technology Trilogy: Business Strategy, Technological Deployment and Organizational Performance," *The Journal of Strategic Information Systems* (10:2), pp. 77-99.
- Daniel, E. M., and H. N. Wilson. 2003, "The Role of Dynamic Capabilities in E-Business Transformation," *European Journal of Information Systems* (12:4), pp. 282-296.
- Eisenhardt, K. M. 1989, "Building Theories from Case Study Research," *Academy of Management Review* (14:4), pp. 532-550.
- Flyvbjerg, B. 2012, "Five Misunderstandings about Case Study Research, Corrected," *Qualitative Research: The Essential Guide to Theory and Practice, London and New York: Routledge* pp. 165-166.
- Hansen, R. 2015. "Toward a Digital Strategy for Omnichannel Retailing," *Unpublished Thesis, Copenhagen Business School, Department of IT Management*.
- Hansen, R., and S. K. Sia. 2015, "Hummel's Digital Transformation Toward Omnichannel Retailing: Key Lessons Learned," *MIS Quarterly Executive* (June - forthcoming).
- Hansen, R., A. Yeow, and C. Soh. 2015, "Aligning with New Digital Strategy: A Dynamic Capabilities Approach," Under review at *Journal of Strategic Information Systems*.
- Hodgkinson, S. L. 1996. *The Role of the Corporate IT Function in the Federal IT Organization*, Oxford University Press, Oxford, UK.
- Hulland, J., M. R. Wade, and K. D. Antia. 2007, "The Impact of Capabilities and Prior Investments on Online Channel Commitment and Performance," *Journal of Management Information Systems* (23:4), pp. 109-142.
- Kapferer, J. N. 2008. *The New Strategic Brand Management: Creating and Sustaining Brand Equity Long Term*, Kogan Page Ltd, London.
- Kearns, G. S., and R. Sabherwal. 2007, "Strategic Alignment between Business and Information Technology: A Knowledge-Based View of Behaviors, Outcome, and Consequences," *Journal of Management Information Systems* (23:3), pp. 129-162.
- Keller, K. L. 2010, "Brand Equity Management in a Multichannel, Multimedia Retail Environment," *Journal of Interactive Marketing* (24:2), 5, pp. 58-70.
- Kvale, S., and S. Brinkmann. 2008. *Interviews: Learning the Craft of Qualitative Research Interviewing*, Sage Publications, Thousand Oaks.
- Kwon, W. S., and S. J. Lennon. 2009, "Reciprocal Effects between Multichannel Retailers' Offline and Online Brand Images," *Journal of Retailing* (85:3), pp. 376-390.

- Makadok, R. 2011, "The Four Theories of Profit and their Joint Effects," *Journal of Management* (37:5), pp. 1316-1334.
- . 2010, "The Interaction Effect of Rivalry Restraint and Competitive Advantage on Profit: Why the Whole is Less than the Sum of the Parts," *Management Science* (56:2), pp. 356-372.
- Mason, J. 1996. *Qualitative Researching*, Sage Publications, Inc., Thousand Oaks, CA, US.
- Oh, W., and A. Pinsonneault. 2007, "On the Assessment of the Strategic Value of Information Technologies: Conceptual and Analytical Approaches," *MIS Quarterly* pp. 239-265.
- Prahalad, C. K., and G. Hamel. 1990, "The Core Competence of the Corporation," *Harvard Business Review* (68:3), pp. 79-91.
- Preston, D. S., and E. Karahanna. 2009, "Antecedents of IS Strategic Alignment: A Nomological Network," *Information Systems Research* (20:2), pp. 159-179.
- Reich, B. H., and I. Benbasat. 1996, "Measuring the Linkage between Business and Information Technology Objectives," *MIS Quarterly* pp. 55-81.
- Reynolds, P., and P. Yetton. 2015, "Aligning Business and IT Strategies in Multi-Business Organizations," *Journal of Information Technology* (forthcoming).
- Riggins, F. J. 2004, "A Multichannel Model of Separating Equilibrium in the Face of the Digital Divide," *Journal of Management Information Systems* (21:2), pp. 161-179.
- Sarker, S., S. Sarker, A. Sahaym, and N. Bjørn-Andersen. 2012, "Exploring Value Cocreation in Relationships between an ERP Vendor and its Partners: A Revelatory Case Study," *MIS Quarterly* (36:1), pp. 317-338.
- Sharma, A., and A. Mehrotra. 2007, "Choosing an Optimal Channel Mix in Multichannel Environments," *Industrial Marketing Management* (36:1), 1, pp. 21-28.
- Sparks, L. 2003, "A Catalogue of Success? Argos and Catalogue Showroom Retailing," *The Service Industries Journal* (23:2), pp. 79-111.
- Van Bruggen, G. H., K. D. Antia, S. D. Jap, W. J. Reinartz, and F. Pallas. 2010, "Managing Marketing Channel Multiplicity," *Journal of Service Research* (13:3), pp. 331.
- Webb, K. L., and C. J. Lambe. 2007, "Internal Multi-Channel Conflict: An Exploratory Investigation and Conceptual Framework," *Industrial Marketing Management* (36:1), pp. 29-43.
- Webcredible. 2012. *Omni-Channel Report 2012* <http://www.webcredible.com/blog-reports/white-papers/omni-channel-report-2012.pdf>.

- Webster, J., and R. T. Watson. 2002, "Analyzing the Past to Prepare for the Future: Writing a Literature Review," *MIS Quarterly* (26:2), pp. xiii-xxiii.
- Westerman, G., D. Bonnet, and A. McAfee. 2014. *Leading Digital: Turning Technology into Business Transformation*, Harvard Business Press.
- Wilson, H., and E. Daniel. 2007, "The Multi-Channel Challenge: A Dynamic Capability Approach," *Industrial Marketing Management* (36:1), pp. 10-20.
- Yin, R. K. 2003. *Applications of Case Study Research (Applied Social Research Methods)*, Sage Publications, Thousand Oaks.
- . 1989. *Case Study Research: Design and Methods (Applied Social Research Methods)*, Sage Publications, Thousand Oaks.
- Zahra, S. A., and J. G. Covin. 1993, "Business Strategy, Technology Policy and Firm Performance," *Strategic Management Journal* (14:6), pp. 451-478.
- Zhang, J., P. W. Farris, J. W. Irvin, T. Kushwaha, T. J. Steenburgh, and B. A. Weitz. 2010, "Crafting Integrated Multichannel Retailing Strategies," *Journal of Interactive Marketing* (24:2), pp. 168-180.
- Zhu, K. 2004, "The Complementarity of Information Technology Infrastructure and E-Commerce Capability: A Resource-Based Assessment of their Business Value," *Journal of Management Information Systems* (21:1), pp. 167-202.
- Zhu, K., and K. L. Kraemer. 2002, "E-Commerce Metrics for Net-Enhanced Organizations: Assessing the Value of E-Commerce to Firm Performance in the Manufacturing Sector," *Information Systems Research* (13:3), pp. 275-295.

Research Paper 4

Hansen, R., and Sia, S. K. 2015, "Hummel's Digital Transformation Toward Omnichannel Retailing: Key Lessons Learned" *MIS Quarterly Executive* (14:2)

This article is not part of this edition of the thesis but can be found here:

If you have CBS login and password: <http://esc-web.lib.cbs.dk/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=102933798&site=ehost-live&scope=site>

If you have not an abstract can be seen here <http://misqe.org/ojs2/index.php/misqe/article/view/554>

--


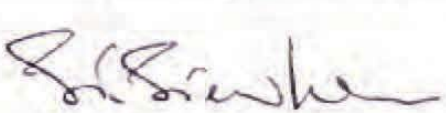
Page 279-294 is therefor not in this edition



Co-author statement

Title of paper	Hummel's Digital Transformation Toward Omnichannel Retailing: Key Lessons Learned
Journal	Management Information Systems Quarterly Executive (MISQE)
Published	2015

1. Co-author (PhD student)	Rina Hansen
Contribution (%)	60%
2. Co-author	Sia Siew Kien
Contribution (%)	40%

1. Co-author (PhD student)	Rina Hansen			
I hereby declare that the above information is correct	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
<div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div> <p>1 Nov 2014</p> <p>_____</p> <p>Date</p> </div> <div>  <p>_____</p> <p>Signature</p> </div> </div>				
2. Co-author	Sia Siew Kien			
I hereby declare that the above information is correct	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
<div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div> <p>1 Nov 2014</p> <p>_____</p> <p>Date</p> </div> <div>  <p>_____</p> <p>Signature</p> </div> </div>				

Source: <https://cbssshare.cbs.dk/vipservices/PhD/Your%20PhD%20Study/Thesis%20and%20Assessment/Pages/Submission.aspx>

Appendix A: List of Papers Published During the PhD, which are not Included in the Thesis

- Tambo, T., and Hansen, R. 2012. Fashion brand owner's responses to e-commerce proliferation, *Proceedings of Nordic Retail and Wholesale Conference*, Lund University, pp. 1-14.
- Hansen, R. 2011. How fashion brands learned to click – a longitudinal study of the adoption of online interactive and social media by luxury fashion brands, *Selected Papers of the Information Systems Research Seminar in Scandinavia*, Nr. 2: IRIS 34 ICT of Culture – Culture of ICT, ISSN 1891-9863.
- Hansen, R., and Bjørn-Andersen, N. 2011. Cube Assessment Framework for B2C Websites Applied to the Fashion Industry, *Proceedings of International Conference on Electronic Business (ICEB)*, Bangkok, Thailand.
- Hansen, R. 2011. How Fashion Brands Learned to Click: A Longitudinal Study of the Adoption of Online Interactive and Social Media by Luxury Fashion Brands. *Proceedings of IRIS 2011. Turku: Turku Centre for Computer Science 2011*, pp. 216-236, (TUCs Lecture Notes, Nr. 15).
- Hansen, R. and Tambo, T. 2011. Branding and Channel Issues in E-Commerce from an Information System's Perspective, *Proceedings of IRIS 2011. Turku: Turku Centre for Computer Science 2011*, pp. 200-215 (TUCs Lecture Notes, Nr. 15).
- Wolney, J. and Hansen, R. 2011. Responsible Luxury: Refashioning Brands through Co-creation, Working paper at the *First International Conference of Luxury and Counterfeiting*, June 9-10th, Wesford, Geneva.

Appendix B: Literature Review Details

The following presents the details of the first five investigative steps of the systematic literature review identified by Williams *et al* (2009), which are analysis results from Web of Science.

Step 1: Multichannel studies according to journals

Table 12 presents the breakdown of our search output according to the journals in which the papers on multichannel appeared during the 1995–2013 period. A total of 28 journals were selected as appropriate outlets for IS/technology, marketing/communication and business research. The table illustrates that the largest number of papers (eight) on multichannel appeared in the Journal of Interactive Marketing, the second largest number of papers (six) appeared in International Journal of Electronic Commerce followed Industrial Marketing Management and Journal of the Academy of Marketing Science. From the Information Systems basket of eight only six papers appeared in the search (Journal of Management Information Systems and Information Systems Research), which indicates a research gap for multichannel studies in the top IS journals.

Table 12 Multichannel Studies According to Journals

Journal title	Article count (n=68)	% of 68
Journal of Interactive Marketing	8	11.76%
International Journal of Electronic Commerce	6	8.82%
Industrial Marketing Management	5	7.35%
Journal of the Academy of Marketing Science	5	7.35%
Electronic Commerce Research and applications	4	5.88%
European Journal of Marketing	3	4.41%
Information Systems Research	3	4.41%
Journal of Business Research	3	4.41%
Journal of Management Information Systems	3	4.41%
Journal of Service Research	3	4.41%
Marketing Science	3	4.41%
Service Industries Journal	3	4.41%
Computer Communications	3	4.41%
International Journal of Research in Marketing	3	4.41%
Internet Research	3	4.41%
Journal of Marketing Research	3	4.41%
Multimedia Tool and Applications	3	4.41%

Step 2: Multichannel studies according to year of publication

Our findings (see Table 13) illustrate that the number of papers published on multichannel related research has constantly increased from 1995 to 2013. To date, the largest number of papers (nine) appeared in 2009 and 2010, closely followed by 2007 and 2011 (eight), while none or only one paper was published in the years before 2000, which indicates that multichannel is an increasingly popular area of research.

Table 13 Multichannel Studies According to Year of Publication

Year	Article count (n=68)	% of 68
2009	9	13.23%
2010	9	13.23%
2007	8	11.76%
2011	8	11.76%
2008	7	10.29%
2012	7	10.29%
2006	6	8.82%
2003	3	4.41%
2004	3	4.41%
2001	2	2.94%
1992	2	2.94%
2005	2	2.94%
2013	2	2.94%

Step 3: Multichannel studies according to country

Our findings (illustrated in Table 14) illustrate that the research presented in the 68 publications we identified on multichannel was conducted in 18 countries. By far the largest amount of published activity has taken place in the USA, with the Netherlands, England, Taiwan and South Korea also having research activity resulting in publications that appeared in our search results.

A number of countries (including France, Canada, and Denmark) have been the location of research, which has resulted in none or a low number of publications. Given the overall level of research activity in such countries, and indeed the supposedly high-profile of information and communication technology (ICT), this is perhaps a surprising result and indicates that there is an opportunity for additional research based in such counties to take place in order to further expand the existing knowledge base.

Table 14 Multichannel Studies According to Country

Country	Article count (n=68)	% of 68
USA	40	58.82%
Netherlands	6	8.82%
England	5	7.35%
Taiwan	5	7.35%
South Korea	4	5.82%
Australia	3	4.41%
Canada	3	4.41%
Germany	3	4.41%
Italy	3	4.41%
Peoples R China	3	4.41%
Spain	3	4.41%
Scotland	2	2.94%
Singapore	2	2.94%
Belgium	1	1.47%
Finland	1	1.47%
France	1	1.47%
Portugal	1	1.47%
Russia	1	1.47%

Step 4: Authors involved in publishing multichannel research

Table 15 lists the authors actively involved in conducting and publishing multichannel related research in the ICT area. Our search identified 77 authors in total. It appears that the most productive author, in terms of journal publications across journals in our search, is Scott A Neslin (five papers) followed by Dhruv Grewal, Venkatesh Shankar, Peter C Verhoef and Ruiliang Yan with three papers each thereafter three authors contributed with two papers each and 45 authors contributed with one paper each in the set of journals comprising our search data.

Table 15 Authors Involved in Publishing Multichannel Research

Author	Article count
Neslin, SA	5
Grewal, D	3
Shankar, V	3
Verhoef, PC	3
Yan, RL	3
Gupta, A	2
Steenburgh, TJ	2
Tang, FF	2

Step 5: Multichannel studies according to field of interest

Five Web of Science research areas have published research on multichannel (see Table 16). The largest number of papers (61) appeared within the 'business economics' category. This is followed by the 'Computer science' category (23) and then the 'information science library science' category (nine). These results are indicative only, and are intended to provide a representation of the main areas of study in which research papers on multichannel are likely to appear. Extending the number of keywords and altering the categories included would alter the results.

Table 16 Multichannel Studies According to Field of Interest

Research Areas	Article count (n=68)
Business Economics	61
Computer Science	23
Information science library science	9
Engineering	5
Telecommunications	5

[illegible]

Figure 15 Multichannel Concept-centric Framework

Table 17 Multichannel Papers Categorized per Subject

Subject	Paper
Multichannel Management	Bang et al, 2013, Channel Capabilities, Product Characteristics, and the Impacts of Mobile Channel Introduction. <i>Journal of Management Information Systems</i> Zhang, 2010, Crafting Integrated Multichannel Retailing Strategies. <i>Journal of Interactive Marketing</i> Sharma, 2007, Choosing an optimal channel mix in multichannel environments. <i>Industrial Marketing Management</i> Sparks, 2003, A catalogue of success? Argos and catalogue showroom retailing. <i>Service Industries Journal</i>
Multichannel Sales	Chung, 2012, Manufacturers' reliance on channel intermediaries: Value drivers in the presence of a direct web channel. <i>Industrial Marketing Management</i> Avery, 2012, Adding Bricks to Clicks: Predicting the Patterns of Cross-Channel Elasticities Over Time. <i>Journal of Marketing</i> Yan, 2011, Managing channel coordination in a multi-channel manufacturer-retailer supply chain. <i>Industrial Marketing Management</i> Van Bruggen, 2010, Managing Marketing Channel Multiplicity. <i>Journal of Service Research</i> Webb, 2007, Internal multi-channel conflict: An exploratory investigation and conceptual framework. <i>Industrial Marketing Management</i> Rosenbloom, 2007, Multi-channel strategy in business-to-business markets: Prospects and problems. <i>Industrial Marketing Management</i> Bendoly, 2005, Online/in-store integration and customer retention. <i>Journal of Service Research</i> Riggins, 2005, A multichannel model of separating equilibrium in the face of the digital divide. <i>Journal of Management Information Systems</i> Webb, 2002, Managing channels of distribution in the age of electronic commerce. <i>Industrial Marketing Management</i>
Multichannel Branding	Keller, 2010, Brand Equity Management in a Multichannel, Multimedia Retail Environment. <i>Journal of interactive Marketing</i> Rowley, 2009, Online branding strategies of UK fashion retailers. <i>Internet research</i> Kwon, 2009, Reciprocal Effects Between Multichannel Retailers' Offline and Online Brand Images. <i>Journal of Retailing and Services</i>
Multichannel Marketing	Shankar, 2011, Innovations in Shopper Marketing: Current Insights and Future Research Issues. <i>Journal of retailing</i> Godfrey, 2011, Enough Is Enough! The Fine Line in Executing Multichannel Relational Communication. <i>Journal of Marketing</i> Shankar, 2010, Mobile Marketing in the Retailing Environment: Current Insights and Future Research Avenue. <i>Journal of Interactive Marketing</i> Varadarajan, 2009, Marketing Strategy in an Internet-Enabled Environment: A Retrospective on the First Ten Years of JIM and a Prospective on the Next Ten Years. <i>Journal of Interactive Marketing</i> Weathers, 2007, Effects of online communication practices on consumer perceptions of performance uncertainty for search and experience goods. <i>Journal of Retailing</i>
Multichannel Customer Management	Valentini, Montaguti, Neslin, 2011, Decision Process Evolution in Customer Channel Choice. <i>Journal of Marketing</i> Li, 2011, Cross-Selling the Right Product to the Right Customer at the Right Time. <i>Journal of marketing Research</i> Neslin, 2009, Key Issues in Multichannel Customer Management: Current Knowledge and Future Directions. <i>Journal of Interactive Marketing</i> Ansari, 2008, Customer channel migration. <i>Journal of Marketing Research</i> Venkatesan, 2007, Multichannel shopping: Causes and consequences. <i>Journal of Marketing</i> Verhoef, 2007, Multichannel customer management: Understanding the research-shopper phenomenon. <i>International Journal of Research in Marketing</i> Neslin, 2006, Challenges and opportunities in multichannel customer management. <i>Journal of Service Research</i>
CRM	Verhoef, 2010, CRM in Data-Rich Multichannel Retailing Environments: A Review and Future Research Directions. <i>Journal of Interactive Marketing</i> Payne, 2005, A strategic framework for customer relationship management. <i>Journal of Marketing</i> Thomas, 2005, Managing marketing communications with multichannel customers. <i>Journal of Marketing</i> Payne, 2004, The role of multichannel integration in customer relationship management. <i>Industrial Marketing Management</i>
Customer Behavior	Dholakia, 2008, Consumer Behavior in a Multichannel, Multimedia Retailing Environment. <i>Journal of Interactive Marketing</i> Konus, 2008, Multichannel Shopper Segments and Their Covariates. <i>Journal of Retailing</i> Kuruzovich, 2008, Marketspace or marketplace? Online information search and channel outcomes in auto retailing. <i>Information Systems Research</i>
Customer Lifetime Value	Kumar, 2010, A Customer Lifetime Value-Based Approach to Marketing in the Multichannel, Multimedia Retailing Environment. <i>Journal of Interactive Marketing</i> Blattberg, 2009, Customer Lifetime Value: Empirical Generalizations and Some Conceptual Questions. <i>Journal of Interactive Marketing</i>
Service, Trust and Profit	Chiu, 2011, The challenge for multichannel services: Cross-channel free-riding behavior. <i>Electronic Commerce Research and Applications</i> Ofek, 2011, "Bricks and Clicks": The Impact of Product Returns on the Strategies of Multichannel Retailers. <i>Marketing Science</i> Wiesel, 2011, Marketing's Profit Impact: Quantifying Online and Off-line Funnel Progression. <i>Marketing Science</i> Urban, 2009, Online Trust: State of the Art, New Frontiers, and Research Potential. <i>Journal of Interactive Marketing</i> Berendt, 2008, A privacy-protecting business-analytics service for on-line transactions. <i>International Journal of Electronic</i>

	<i>Commerce</i>
Other	<p>Ganesan, 2009, Supply Chain Management and Retailer Performance: Emerging Trends, Issues, and Implications for Research and Practice. <i>Journal of Retailing</i></p> <p>Wade, 2006, Development and validation of a perceptual instrument to measure e-commerce performance. <i>International Journal of Electronic Commerce</i></p> <p>Johnson, 2005, Digitization of selling activity and sales force performance: An empirical investigation. <i>Journal of the Academy of Marketing Science</i></p>

Appendix C: Top Management Citations

The following table presents the top managements' citations on the four interview subjects: 1. OBOV, 2. Social media, 3. Online retailers, 4. Ecommerce and multi/omnichannel at the end of 2010, 2011, 2012 and 2013, as well as evaluation in 2014.

Table 18 Top Management Citations 2010-2014

	CEO	CMO	CSO
2010			
OBOV	<i>"We need to take control of the "food chain". Create a central site and make sure that we get all Hummel partners under the umbrella"</i>	<i>"For Hummel to be international we need to go digital! I get tired from thinking of the many different value propositions we have in the different markets. Unaligned price policies, unaligned distribution policies and so on. The thing is, the consumer is not waiting for us to sort ourselves out. They expect it now!"</i>	<i>"The thing is that it is nearly impossible for Hummel to be one voice one brand as it is now. It's more like one brand many voices".</i>
Social Media	n/a	n/a	n/a
E-tailers Indirect Sales through etailers	<i>"It is important to have a strong strategy for our existing online retailers. We could work with a shop in shop model for the big guys, Amazon, Smartguy, Intersport, etc., so that they display our products correctly according to guidelines, that we set up – and so that we get the most out of their traffic. Not everyone can open a shop in shop. There is a filtering process, like in offline retail. We do not want our products in a basket in the street, neither do we want our products displayed badly online"</i>	<i>"We need to begin to make ourselves available for the consumer. The consumer preference is availability, service, customer experience and so on. We can offer a good product with good quality – and if we can offer all the things to the consumer, then why not give it to them? Especially when we have not really penetrated any markets yet"</i>	<i>"I'm fighting to keep our number of online retailers below ten. I'm especially fighting the Kids online retailers. We have people calling every day wanting to sell Hummel. But it's important to keep it exclusive". "I quite like the shop in shop (LazyLazy) concept. We can sell fashion and collaborations there, also to the Danish market. It is not seen as a Hummel shop, so it is not "in your face" for our retailers".</i>
B2C Ecommerce	<i>"I do not want to launch a full web shop in DK, but offer statement collections instead. Not to upset the retail network". "Another possibility could be customization offered exclusively online; Special styles (not sold in shops) open for customization i.e. shoes with customized colors and initials or name" "We should not start selling in Denmark – only special items and</i>	<i>"We need to begin to make ourselves available for the consumer. The consumer preference is availability, service, customer experience and so on. We can offer a good product with good quality – and if we can offer all the things to the consumer, then why not give it to them? Especially when we have not really penetrated any markets yet" (as etailers above, as he viewed ecommerce and online retailers as one and the same thing when it came</i>	<i>"I'm against opening a web shop in DK but think it is a really good idea in the other countries. Even Germany. Here we need to raise the brand awareness but in Denmark we have already saturated the market. (...) The dealers in Denmark would be really pissed off. Even if they get a cut of the sale. I have said that if we do open a web shop in DK it will be without me!"</i>

	<p>statement collections. We should rather start with Germany as a test market plus perhaps Sweden and UK, but there is a delivery time challenge. Not Norway as we don't want the tax issue battle in the test period. In 2012 we can launch widely.</p> <p>"We don't need to look at license and global markets now – that's later".</p>	to availability)	<p>"I do not want to sell in Denmark at all. Not even collaboration collections. It would be equivalent to selling something small in Bilka - you just ARE selling in Bilka. Everybody would scream"!</p>
Multi-channel	n/a	n/a	n/a
2011			
	CEO	CMO	CSO
OBOV	<p>"If we hadn't taken control of Hummel's online presence and made some guidelines now, I think it would have been impossible to implement brand control in a few years from now. I have this inner picture; that all the contacts, shops, distributors etc. would have taken control themselves.. But now we are slowly gaining the control – taking it back from them. And that is super important, and this is just the start. That's why I have given it so much attention on CEO level".</p> <p>"Online sales is not my priority now. Businesswise it does not matter if I sell for 1 million, five or ten millions. That is not my worry. But if I don't get control of the brand and the sales distribution online, that would be a worry".</p> <p>"It is a significant change for the company to achieve a common direction online. One Brand One Voice, as we call it".</p>	<p>"I'm to a larger extent able to execute One Brand One Voice. Securing more consistent marketing efforts and building a better consumer experience of the brand. I'm also to a larger extent able to control the different countries. They have been able to do exactly what they found right. There has not previously been a strategy for who should own the Hummel domains – and not a single paragraph about online what so ever. Not ecommerce, social media or anything. Now it's also easier to build competences in the markets and educate the responsible, because we can show when to communicate what and how. We lead the way centrally. One thing is communicating to the consumers, but more importantly we also show the countries. We will hopefully reach the point where we with one click reach our globally. Being more lean and effective. But furthermore I hope that the website will be our most profitable and effective branding tool above any other touchpoint. I wish to be able to say, in two years from now, "we own the consumer contact now"!</p>	<p>"Imagine that we have been telling an inconsistent and wrong brand story for years. That gives you a stomach pain! We were far from being a united brand. But now we can guide the countries - through online we can support the values of the brand and tell the "true" Hummel story globally"</p>
Social Media	<p>"I knew that it was important for Hummel to gain control of the brand online. But it was first after your analysis I realized how bad our situation was online. I thought, shit, how could I have let it come so far? All these weird (..) Facebook pages (..) looking horrendous, no, no, no. So on one hand the realization has been an eye opener for how bad it was. On the other hand, if I hadn't realized that, I wouldn't have</p>	<p>"Having guidelines for social media use is a revolution for us, not an evolution. It has first and foremost contributed to understanding. When we understood the technological and interactive possibilities we understood how far behind we were. The project has contributed to an important realization [..] and we had never taken any action without this realization. It also contributed to the marketing department becoming a more commercial machine, in the</p>	<p>"I was shocked when you first showed me that there were 10-20-30 different brand expressions Internationally. We should all have been telling the same story. So I was embarrassed that we hadn't been more caring of our brand. We lacked the McDonald effect in Hummel. But now we have started to take control, working towards One Brand One Voice, and I think we feel more at ease and proud about expressing</p>

	<i>been so impressed with the result we have now"</i>	<i>way that our rights in our distribution network internationally have become more streamlined"</i>	<i>the same tone of voice; giving the consumers a unified brand experience"</i>
E-tailers Indirect Sales through etailers	<p><i>"I did not realize before how important it is to invest in our online retailers. We could happily have continued as before, not caring about how we appeared on our top retailers' sites. I have a completely different focus on that today. Our online retailers help make our brand known, they tell our story, they sell our goods. Therefore we must control how they do it".</i></p> <p><i>"It is tremendously important to start handling the online customers from a strategic point of view; should we deal with this retailer or not? Zalando, where do they belong? We would never have had had so much focus on the strategy if you hadn't pushed for it. It has our focus now because you were at the managers meetings from the start where you told about it – and where we all thought, well yeah.. but then eventually we all thought, shit, it is about time we take online customers seriously"</i></p> <p><i>"It is not so important for me to market our own website. It's a lot more important that Amazon rocks it – that the millions of people who visit Amazon thinks, shit Hummel is cool. That's a better investment for us. That we are presented super well at our 20 top online retailers' sites. The number of views we get there, compared to what we can attract on our own site, is thousand fold".</i></p> <p><i>"Where we make our money is wholesale. I would rather invest in getting the guidelines and brand buttons implemented than investing in our own ecommerce site. Wholesale is where our return on investment is".</i></p>	<i>"The online retailers are important to us. Through them our brand has a wider availability, which is paramount, and by controlling our brand expression on their sites we will have a stronger brand – and yes - a larger turnover"</i>	<i>"The online guidelines mean that thoughts, dreams and future has been structured. And that is important for a company in rapid development. We can't encourage action if there is no structure, especially not for the online area. It's a little easier to live with half a solution offline, as you can talk your way to a full solution. You can't do that online; it's too transparent"!</i>
B2C Ecommerce	<i>"We need to focus on our own operations first. I would rather sophisticate our own local websites than get our country partners on the corporate platform. We need to have the central structure in place first,</i>	<i>"The website project has contributed with insights, realization and a better understanding for the fact that ecommerce has a far larger business potential than we previously thought. We have once and for all "killed" the old silo policy about the web only</i>	<p><i>"Ecommerce can be a large part of our business, and I, at least, should try to understand and leverage this potential"</i></p> <p><i>"I'm in principle still against Hummel launching ecommerce as</i></p>

	<p><i>make it really cool, so that people would be thinking: I would give my left arm to be part of that. That would put us in a better bargaining position when we need to negotiate with the country partners”.</i></p>	<p><i>being a marketing tool – the company’s business card. There is however still a lack of will and capacity, cross-departmental, in getting the entire business adapted for the full potential”.</i></p>	<p><i>I'm eager to protect what I personally have built over the last 7 years. And I have properly been a bit old school in relation to what I called compete with our existing business. I have maybe moved towards calling it supporting and helping our existing business. And I have gained a better understanding of how many consumers use the internet for information and inspiration. There is actually a lot of consumers that end up buying the goods in the shops because they had a great brand experience online. And I have become a little more knowledgeable through the process of working with the online project”</i></p> <p><i>”I think I have gone from only seeing the limitations and challenges – the old school way of thinking – to seeing the possibilities. And as we are going into business online, we might as well exploit it the best possible way; showcase our brand and potential in the best possible manner. Present ourselves in a cool way, just like we do offline. So I have put on another online hat and view it more constructively. I see the possibilities just like I do when we talk physical shops”.</i></p> <p><i>”I have gone from being the one who was like “uhh” to being an ambassador for the online project. And I'm really trying to influence my employees, telling them that this can be an exciting business case. It is something that will develop. It is only going to get bigger and bigger. And we want to be part of that journey”</i></p> <p><i>”I slowly got to this realization. I'm not out of an online world. I constantly think shops and shelves, experiences and discoveries for the consumer. Now I have to think about many of the same things, but transfer it to an online environment”</i></p>
Multi-channel	<p><i>“The multichannel model has been the biggest eye-opener for me. I never realized how</i></p>	<p><i>“The multichannel model has given me two things: 1. An overview, proactivity (as the model is</i></p>	<p><i>“The multichannel model helped me to easily understand where Hummel fits in, where we are</i></p>

	<i>multifaceted the digital environment was. It's really important having a total picture of our online situation – what we are facing, where we are focusing our efforts, and why".</i>	<i>dynamically updated) and control. And when I have an overview it leads to a plan. 2. A competence in deciding actions for the different channels".</i>	<i>going and what is affecting that. If you tried to explain that in words, you would have lost me"</i>
2012			
	CEO	CMO	CSO
OBOV	<i>"It seems like our partners are really happy with the global site and with aligning everything"</i>	<i>"Social media is where our strategy through the last four years, one brand one voice, is implemented fully. (..) It strengthens the Hummel brand tremendously towards the consumers"</i>	n/a
Social Media	<i>"It was good to get the different social media (Facebook country pages) gathered in one Global Hummel page. It actually exceeded our expectations, right"?</i>	<i>"This (social media) is the only place where our strategy through the last four years; one brand one voice, is implemented fully. Let me put it like this, for us we are amongst the best regarding how to drive a brand on Facebook. (..) So it clearly stands out as an internal educating example for a lot of other disciplines in brand expression – and this (Facebook) is even a place where we sell commercially as well"</i>	n/a
E-tailers Indirect Sales through etailers	<i>"I think that your focus will be the big online retailers. It is crucial in order to control the next year that we can be professional producer for them. You and I know that approximately 20% of our turnover will come from those 10-20 big online retailers in a few years. That's a lot! And we need to.. We have a goal that they should experience Hummel as "they can do that thing. There are so many exciting collabs and their products look great online, and they are fantastic to work with and so on"</i> <i>"I think that what we focus on is having our products presented really well at our online retailers, so that our sell-through will continue to be as high as it is. It's not that our B2C business is not important, but we need to focus on the big online retailers so we can hang on to the big guys there"</i>	<i>"It (online retail) is currently the area with the far largest potential businesswise for Hummel. And with business I mean concrete exposure that leads to sales"</i>	<i>"The most important thing is to initiate something with the chains. They are becoming more and more centralized"</i>
B2C Ecommerce	<i>"We know the countries' interest in it (B2C ecommerce). It is basically that they don't want to harm the retailers. Oh no, what do Görtz and Intersport and so on say (if we launch B2C ecommerce)? But you and I who</i>	<i>"It (the website) is the most important path to achieving brand availability for Hummel. And most important because it is accessible 24/7 for all geographies, all ages, all nationalities, and it is across all this a place where we can publish as many</i>	<i>"Few have commented on it (the fact that we have launched ecommerce) officially. Few have discovered it and seen it. The few that have discovered it have commented on it with an underlying tone of, whether it is</i>

	<p>brand the company have an interest for the consumer to go in and buy a great product. And you might have another interest, which is that consumers see the product on our site and then go to the shops and buy it. That is why we work with ASOS (online retailers); we know that consumers see the product at ASOS but perhaps end up buying it in the Görtz shop”.</p> <p>“Our focus is to sell the brand oriented products, the attractive products, right? Those that tell a story about us. It could be 100 or 200 products, but not 1000 products, right”?</p>	<p>stories as Hummel has. And we have many stories, as we are a storytelling brand – at least we try to be”.</p> <p>“It (the website) has a really really strong external brand value, but also a – what shall we call it – a professionalization value for Hummel internally. (...) It furthermore has an educating effect on our own partners”.</p> <p>“My attitude (towards ecommerce) has not changed. I have all the time been pro ecommerce. We are lacking behind (our competitors) by not taking full advantage of what we present today. (...) We need to be competitive. Not ahead of competition, but just competitive. That’s one thing and then the other thing is to live up to consumers’ minimum expectations. What has changed since last year is that we now have a case in Germany where our country director has realized that Hummel can sell without consumers having touched the product. There are areas of Germany where we don’t have Hummel shops. Here consumers have heard about Hummel purely through digital channels (...) That tells me that we have to continue the internal fight, which it is, to get this (ecommerce) pulled through. (...) Ecommerce has changed the attitude internally”</p>	<p>something we have done behind their back and whether we are trying to compete with them, the sports business”.</p> <p>“Earlier our argument was that we were the ones who “kept our path clean”. It would be wrong if we went in and competed with them now. I have spent my energy on telling them that, we are not selling volume products (...) we intend to expand the assortment, but we won’t compete on the products which we are selling well with you”</p> <p>“We can’t defend ourselves by saying, “it is only a few products” or “we only turnover so little”. The fact that we have a check out on our site says that we are one of the bad guys. They can’t see if we sell a little or a lot”</p> <p>“They would say, “well we haven’t sold as much as we used to. But that’s understandable when you guys have (started ecommerce)”</p> <p>“The future is coming and I have changed my opinion. I would like to be part of coaching and teaching the industry that this is the direction it is going especially for Hummel”</p>
Multi-channel	<p>“The multichannel model is easily understandable for everyone. I use it in a way where I don’t go into details with it, but instead illustrate how complicated the online environment is, and I use it as an example of the many ways we use the channels. Both on social and web (ecommerce). And then I think it is a good finalizer when I harshly show where we prioritize our efforts”.</p>	<p>“Focus on channels has changed dramatically for Hummel. Now we are not anymore just focused on our offline key accounts, our bricks and mortar customers. Now we also recognize the need for and the importance of a Hummel mono-brand store – both on line and offline – as part of being an attractive brand. Turkey is a great example of how that has been executed, and that is a market, which has grown from nothing to being our third biggest market in less than three years. And they have a multichannel approach, which tells us something”</p> <p>“It is a necessity (to be agile and able to adapt our multichannel model). We have to master this, and we have to educate our organization in thinking commercially about more channels. One of the key</p>	<p>“Having a multichannel approach is really smart. It is for example less noisy to sell indirectly via shop in shops or online retailers. We make our good partners better and we become stronger through them”.</p>

		<i>competences (in the job description) for our new Key Account Manager is a multichannel focus. We now have a criterion for multichannel focus, understanding and experience. We have never had that before"</i>	
2013			
	CEO	CMO	CSO
OBOV	<p><i>"Generally OBOV is one of our main strategies, but also the most difficult one to achieve. I have a dream, which is not fulfilled yet, of us going to market every season with one message, which covers everything".</i></p> <p><i>"Looking at OBOV, I think that online is the area which has developed the most in the company. Coming from a completely scattered random picture depending on the country to having a common platform. It is not completely identical for all markets, and perhaps it shouldn't be, but the basic structure for all our large interesting markets are now the same – for the first time ever".</i></p> <p><i>"In the future, we will not ever create campaigns, which are not online campaigns from the starting point. We are thinking multichannel, but we will not make campaigns which are not online – it would be foolish not to".</i></p>	<p><i>"OBOV is a question of standardizing versus complicating things. I have experienced the value of OBOV where we seek standardizing and synergies, efficiency and effectiveness through tools, processes, brand expression, products, campaigns and so on. OBOV is our most important frame of understanding for how to service our markets and customers. And contrary to three years ago OBOV is now becoming more and more of an institution for us. It has become a culture, a way of thinking, so when one hear OBOV one knows "oh yes, we all need to things more aligned" or "we need to do the same". We do that to get more bang for the buck. Whether it is backend or frontend. And OBOV has become our most valuable weapon against the enemy called complexity".</i></p>	<p><i>"Compared to 2010 I now think that we have a higher degree of the McDonald effect. Meaning that now the online visitor in Shanghai will have nearly the same brand experience as the online visitor in Finland as we have a common platform and a common brand expression – which is what One Brand One Voice is about".</i></p> <p><i>"An extreme transformation has happened especially via the digital media. It can be difficult to achieve the same transformation in the physical word, in the stores, as you are dependent on a lot of people's different ways of translating the brand. And there are thousands of stores. The thing is often there is one online store, one platform, which can be shown everywhere, and not five thousand stores which need to look the same".</i></p> <p><i>"I think that we can be stricter in the future. But we need to set the scene, coach, guide, and teach all our countries and partners before we start to say "hey!" I think we need to look in the mirror first, set the scene, and say "we can do this for you". And when we can do it ourselves, we can demand, "now you need to level with us". It's about keeping momentum, set the bar, and set new standards for digital. The digital world is constantly evolving so we constantly need to step up, be one step ahead, and be a good example. That I think is the big difference compared to the</i></p>

			<i>physical world”.</i>
Social Media	<p><i>“It is a tremendous joy, and a bit surprising, that we have become so successful in the social media space”.</i></p> <p><i>“I’m convinced that social media is linked with our sales platform. The controlled branded space is an extremely important way to gain likes and interaction”.</i></p> <p><i>“I’m more and more convinced that knowledge of a company’s mission and standpoints – just knowing the company and aligning with it – makes for re-purchases and positive conversations. And today I don’t see many other possibilities for achieving the emotional attachment to the brand than through social media”.</i></p>	<p><i>“As a CMO social media means extremely much to me. One, because I know that consumer behavior and purchase patterns have become more digital. Two, because it internally helps us to develop an on-brand expression in all our markets with all our partners. Especially in markets where we don’t have on-brand products, we do all we can to give the consumers an experience and impression of a coherent brand on social media”.</i></p> <p><i>“It is valuable to us, as it gives us real time insights into consumer behavior, reception of products, campaigns and sponsorships. We could buy expensive analysis from research institutes, or we could do what is far more effective and which is using Facebook. So social media is absolutely contributing to the business, it’s not just a communication channel. It helps qualify my decisions for a number of things. For example, you told me that there was zero response on the Sheffield activation, then it disproves my own thoughts of there being lots of sympathy for the worlds oldest football club”.</i></p>	<p><i>“Now social media is really impactful for us because it’s more measurable. Because we do things in the same manner. Before we shot in all different directions. Now when we shoot in the same direction we can better see how we hit the target. And we all shoot with the same ammunition”.</i></p> <p><i>“Often social media can lead to sales in the physical store, and that is just as good as sales online. We don’t always think about that because we can’t see if the person ended up in the store”.</i></p> <p><i>“Social media has become a far greater part of our everyday. So we are just used to that’s the way we communicate now compared to three years ago when you asked me the same question”.</i></p> <p><i>“Just few years ago we would place ads in newspapers. Now we talk about banner ads instead and about which media and how many clicks we can get and where the clicks should lead to. That is just natural. We have changed and the consumer has changed. It is just important that we sometimes move forward as a brand, faster than the consumer”.</i></p> <p><i>“No doubt we got that “coolest brand of the year” price because of our social media efforts – how well we build the brand and told the story – more than because of how people experienced the brand in the stores”.</i></p>
E-tailers Indirect Sales through etailers	<p><i>“There are two reasons for why online retailers are important for hummel. One is that I believe that their reach and their expertise are a lot bigger than our own. And it</i></p>	<p><i>“The profit of online retailers is very clear compared to brick and mortar retailers, and the transparency of the profit has increased in the organization. We are dependent on</i></p>	<p><i>“We shouldn’t be so afraid of teaming up with both new skilled partners and existing partners. This thing about only being present on few virtual street</i></p>

	<p>is also bigger than our retailers' online business. I don't think that InterSport or SportMaster ever will be big on ecommerce. ASOS and Zalando and all of those, they will be big, because they can just do it. The other reason is – and that's a real CEO judgment – that it fits into our supply chain model core competence. What we are best at is wholesale. And online retailers fit right into our wholesale model – with a few changes which you and your team and the logistics team create. It is not a new business system, which has to be built. It is fundamentally the same. We are really good at brand level, at product level, and we are a really really good supplier. So I think that when Zalando go through their suppliers we will end up in their top 10 list. Maybe even top 5".</p> <p>"It is typical CEO thinking to use the capacity we already have".</p>	<p>them in our business and we are dependent on being attractive to them. I have realized in the last year that we need to look at online retailers with a differentiated view. We need to keep in mind which profile they are creating for themselves. (...) We need to have a diversified mix, and not put all eggs in one basket e.g. with Amazon. We need some online retailers who are willing to invest in being a brand (...) and not just jump on the tier 5 online retailers to chase the volumes. We need to look at the online retailer mix just as we look at the classical high street".</p>	<p>corners is not valid anymore. It's rather about finding the right partners who are skillful and have the right setup, which we can unite with our values. Like previously we shouldn't be afraid of getting some more retailers if it is the right retailers, which can tell our brand story in the right way".</p> <p>"I don't think you get credit for being the brand that is limiting itself like we previously did by arguing, that we were present online fewer places than other kids brands".</p> <p>"It is a lot easier to spread the message and reach people online than it is through each local little shop. The resources that are spent on activating the little shop, which needs to do the right branding with six employees wherefrom two only comes in on the Saturday, are extreme compared to the cost of hitting millions of people with the right branding online. So it's actually a pleasure to work with the digital media where you make the right effort once while reaching globally".</p> <p>"Online retailers are actually contributing to a stronger One Brand One Voice. And another benefit is that when people then meet the brand in the physical store, they already have a better understanding of the brand, because they have experienced it online. The physical store is not always capable of expressing the brand, so the online stores are helping the physical stores in that sense".</p> <p>"The online experience contributes to a stronger brand value, because the feelings that are evoked online I can take with me whether I shop online or offline".</p>
--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>B2C Ecommerce</p>	<p><i>"You know I have this controversy about how much we should push our own ecommerce business. But I don't see any other way than just making it work. That has been our first strategy, right? The systems just need to work. Now it works, I think that we need logistics in place. It is not in place today for large-scale ecommerce, but we can make it work for now. If it were anything like normal ecommerce volumes our logistics would collapse. It's a bit like an elephant in a porcelain shop. It can work, but it is unstable".</i></p> <p><i>"If I look at our next step in ecommerce, we need to have a proper offer and a wide assortment. So that people can say, "Oh, this is from Hummel. Its really cool". We need to have the cool products for sale, right? People need to know that you get the cool stuff by going to hummel's website. And with that I mean that next step for us, for example for autumn 2014, is having the great boots with membranes for sale with the whole explanation about children, comfort, warm feet and so on. We don't need the full assortment, but the cool styles. So that if your local little boutique doesn't have it, hummel.net has it. Not cheaper, but free shipping is okay".</i></p> <p><i>Where we before said, that we just needed the systems to work, I think that, as soon as we have the logistical setup, we need to offer something so that people can say, "it actually pays off going there to have a look".</i></p> <p><i>We actually need goods in the store. We need to control carefully what we put in the store, as I have always been afraid of getting that longtail of</i></p>	<p><i>"My attitude towards our own website and ecommerce channel has not changed. In my opinion it is absolutely crucial for the brand. Much more than Facebook is. Its crucial to have a website where you can go in and find all information about the brand, the products and that you can buy all the products. I'm not saying that you only need the website, I should say multichannels, all channels should be available. We need to be where the consumer wish to shop. And that is on the mobile, the laptop, iPad and all other channels. Because the consumer has less and less time, but more and more choice and more and more brands to choose from. Therefore it is a matter of being in business to be available".</i></p> <p><i>"I have never been satisfied with where we are. So I can't as the CMO say that I'm happy with where we are today. I'm happy with the competences and the technology. And I know that there is willingness in the organization. But there is inertia, a fear and a change management issue, which still implicates the speed with which we are executing. (...) I'm though confident about us moving in the right direction, but I think that we should have been further on by now".</i></p> <p><i>"I think that our ecommerce business has the potential to have a significant financial importance. It will achieve this, when we get some fundamental issues agreed in our normal go-to-market structure. (...) I can't imagine anything but hummel's own brand site getting the status of a key account in the business. I think that it will be a strong mix of a profile and a business key account. (...) But it will be a key account because we have a fantastic profile and integration with other branding messages and everything. And therefore we would be eligible to get the product packages with the right timing, support, advertising budget and so</i></p>	<p><i>"No, I have not had any big complaints in Denmark".</i></p> <p><i>"What I have protected and still are protecting are the products, which are widely distributed – both online and offline. And I think if some product groups are very widely distributed then there is no reason for us to sell it on our website. Especially not in a time where the retailers are struggling. I think it needs to be a process. A process where we release more and more products for sale. And I have changed regarding that, I know now that there is only one way to go – and I could not even contain that sentence preciously! But I know that we will end up selling full assortment. Because what does it matter if you are selling 80% of the assortment, then you might as well sell it all. I understand better now that when we create the experience online, then why not keep that momentum (for selling)".</i></p> <p><i>"Ecommerce can become a business for us, but we will need to be more willing to take the risk of having stock. Right now we have a CEO who says that we should only purchase what's ordered, and maybe even less, because shops will close or run from the order. So ecommerce will demand a new structure and a risk willingness and it will demand that we as a wholesaler will become more conscience of what it takes to become a retailer.</i></p> <p><i>Right now it's a little like "cobbler stick to your last". Retail just has some other virtues, I know that from many years as a retailer, and we need to shape the team in another way. It's just other demands.</i></p> <p><i>I can imagine that ecommerce</i></p>
-----------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

	<p>something that we will never really sell.</p> <p><i>"So my attitude has actually not changed. I still don't want to burn millions on getting people to visit our website. Now I think that we need is to be in supply, and we need to be aggressive through our own Facebook, newsletters and so on bombarding people with our cool stuff. Just as much for them to end up buying it at Zalando or somewhere like that. But I don't mind doing free shipping and giving away socks or something special from Hummel.</i></p> <p><i>"I don't see us running a big business yet. Now I just think that we need to offer a broader assortment, which makes it attractive to visit the site. And maybe in the next phases we will realize that we are now making a business here".</i></p> <p><i>"To be completely honest I don't think that we ever will reach the same turnover as a key account. I don't see that, and that's an acknowledgement of that there are many things that I don't see. I need to get through a lot of things blocking my view right now before I can say, "yes I think we will reach it". Yes, perhaps like a normal shop that turns over 6, 7, 10, 15 million is cool. I reckon we can do 10 million in 2016 or so. But from that to being a significant contribution of our total turnover, that's pretty far I think".</i></p>	on".	<p><i>will be part of our turnover. The question is how important it will be, because if it becomes important then it needs resources. And I think it takes more resources than anyone is aware of. So one needs to decide how much to prioritize creating a business, as it takes resources and investment. And that has to go hand in hand with the outcome one expects to get.</i></p> <p><i>Its impossible to create a business as it is now. As soon as we start (running discounts and deals) then we will get in trouble (with our retailers). We really need to set the good example.</i></p> <p><i>There has been a rather big transformation and change in my mind-set within only few years</i></p>
Multi-channel	<p><i>"I think that ecommerce can reach 10% of total turnover in the countries where we have retail. We can be very aggressive through those. Retail needs to be highly involved in order to make it (ecommerce) attractive for us. If we have 140-150 shops and maybe 300 controlled spaces,</i></p>	<p><i>"I don't think that we take advantage of multi/omnichannel today. The importance of omnichannel, when I look inwards at Hummel and outwards at the market, keeps increasing. (...) I'm hopeful as we have the competences and know how in-house, but I'm not sure that we have the competences in all the</i></p>	<p><i>(iPads/endless aisles in store) "would be a competitive advantage for us. A new competitive advantage and a three times win. A win for the store, a win for the customer and a win for us. So I think its super exciting".</i></p>

	<p>then I think that we can make 20 million from our own website. Because then we have 150 outlets which constantly leads people to our website. Every time there is something which they don't have in the store, the assistant can say, "come right over here, you can buy everything here. And why not get it sent to your home, so you don't have to carry it". That will be another thing all together, and therefore we need to consider what to do with our shop in shops. When they are up and running in 2014-15 then we need to see what to do to drive online sales through there".</p> <p>"I said before that I cant see ecommerce becoming a significant business, but if there is one place where I can see it, then it is through our controlled spaces, shop in shops, etc. from there we can guide the ecommerce sale. In the beginning we might give an excessive high proportion of the sale to the locale shop that conducts the sale for us, but that's okay as at the day of truth we end up with the customer".</p> <p>"I think online multichannel is the only right thing to do. We don't have a big pressure on it today, but I think that the hidden benefit will always be a lot lot bigger. It's like an iceberg. I think that for every 1 shoe we sell online, we have influenced 9 sales elsewhere. Therefore I recon that multichannel is the right path for us. But I also think that there is a danger in it, as I can see people throwing themselves over a new media as soon as they pop up, and it can be a difficult maneuverer to select the right channels. I'm happy I'm not responsible for that".</p> <p>"There will be a lot more digital in store. In some way or another,</p>	<p>countries to execute omnichannel".</p> <p>"When we have a retail solution, a shop in shop, at around 60 square meters, we should offer to put up a screen where we can give customers access to a far larger assortment than what they have physical space for in the shop. That would be the first step for us. You would digitalize the physical retail space in order to sell more and in order to offer them a larger profit in the space, yes. They have normal handling cost by selling a product, which they can't show physically. But they get a cut of the sale without spending much time on it, without warehouse cost, shipping cost, returns and claims, etc. It's a pure win for them. It is not just more sales, its larger profit and thereby a larger entitlement for our general physical existence. For what it is worth it can also be differentiating from our competitors, who are still not in the market with screens in-store. And we can place ourselves in a category with brands like Nike and Adidas".</p> <p>"Soon we will reach a point where we will have to think more about co-creation or in involving creative communities out there. Right now we can't attract a top-notch footwear designer who sits in Oregon at Nike and offer him to come to Aarhus. So omnichannel for me is also about back-end value creation and not just front-end".</p>	<p>"I still see multichannel and selling though shop in shop as important, but on the other hand, I'm more and more for going out there to be a first mover within some areas. Because one thing is being strong through your partners, but it actually starts with ourselves. If we look at ourselves as the Head Quarter then we ought as a minimum to have an interesting platform where we create the full brand experience. Perhaps we then also should take advantage of that when customers are in the buying mood. Right now you can't really seal the deal so you have to go elsewhere and then frustration arises. So yes, we need to be strong through our partners but I think that I have moved more towards starting with ourselves. And with that said, leveraging the excitement and value, which we have created for people to, for example, purchase".</p> <p>"And maybe in the future move some of the turnover unto our own site".</p>
--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

	<p><i>we need to use the stores to lead customers to something digital. It is a lot easier to get customers to “just look at this one”, “do this” or “you can get more information here” when you have them in your branded environment”.</i></p>		
2014			
	CEO	CMO	CSO
Reason for sponsoring the PhD project	<p><i>The only thing I knew was that this thing [digital] was something we needed to do something about. Internally in the company, including myself, we had no such knowledge at all as to what the world or market would bring in the next three or four years [in terms of digital]. So we needed something; we needed capacity, brain, power within this area. So that was actually the only knowledge I really had. That was the reason for taking up this PhD.</i></p>	<p><i>The reason was first and foremost, that we in general wanted to strengthen our digital capability but also competence. We knew that it was an area that hummel did not possess any significant skills within so looking at you back then as a profile and within this project we saw the possibility to strengthen our profile. The beauty for us was having a person working not solely as a researcher, but also intervening and implementing at the same time.</i></p> <p><i>Another reason was that I thought we might achieve some competitive advantage at some point. I didn't understand to what extent, where and when, to be quite honest. Not a lot had it [the digital capabilities] at that point.</i></p>	<p><i>We knew that we were facing some challenges at the time. For me it was especially that we were not talking with one voice as a brand. It was a case of every man is his own fortune – uncontrolled expressions across countries and product categories. Different platforms. Different positions. So the consumer perception was totally different dependent on where in the world you sat.</i></p> <p><i>The reason why we had to use digital for cleaning up and aligning was that we realized that consumers gather brand information on the internet to a larger extend than in the stores.</i></p> <p><i>We now understand that you have to start online before you go offline. So as a company you need to prioritize the digital platforms.</i></p>
Contributions from the PhD project	<p><i>The contributions has been vast in the sense that if you see it from a complete overall perspective it has actually given us a possibility for reaching the business targets that we set forward in our 2016 strategy plan. Without the PhD we would not have been able to reach these at all. So you can say, that's the umbrella of the achievements – that it has enabled us to reach the targets.</i></p> <p><i>We have aligned our own communication and we have aligned regional, and we are on our way of reaching an international alignment. We have the platforms aligned now, meaning that countries have the same platform. Which we were not even close to having before. I</i></p>	<p><i>There are several returns or outcomes. For one, if we go back, remembering where we began, as a wholesale company and a brand that was completely diluted internationally at least. Not linked in any way, except heritage. We did not have a go to market plan or presence that was OBOV – one brand one voice at all. We knew that we needed to strengthen our capabilities, we just didn't know how –or how much of an impact it would have back then.</i></p> <p><i>Now we have knowledge and we have structure because we have the tools that have been developed via your knowledge, work, research and possession of skills. So our ability to react to market conditions, customer needs and own branding conditions has increased dramatically. And</i></p>	<p><i>We have first and foremost the possibility to communicate with one voice because of platforms, structure, processes and tools. Now we are getting closer to the McDonald effect.</i></p> <p><i>In the international Go-to-Market group we can now speak one language because we are united in on a platform and in a network digitally. That we can use for a sales strategy in the physical stores. I have realized that you can't start this in a store and then go digital. Because digital is first in the value chain.</i></p> <p><i>It is important for a company to be able to handle the digital development. It has given us some confidence. It is not just</i></p>

<p><i>think we had 22 or 24 different platforms [websites] a few years ago, which we have now changed into one. So that is one achievement of the digital department.</i></p> <p><i>Regarding business, we now have the professional tools and the capability to deal with online retailers in a successful manner, which we didn't have before. It is in fact today close to 12% of our total worldwide sales. It was below 1% before.</i></p> <p><i>Having built an option to work omnichannel, we have also in a technical sense built an IT structure now, which enables us to do not only B2C and B2B and online handling, but the whole product data handling, which is of eminent importance. So I think, that it is only fair to say that we are putting a lot of emphasis on the IT structure of the business. And coming from a system of Navision, where we prior to this project had no connection what so ever with the digital world, it is now quite closely connected. And going forward, one of the top priorities we have is to make this whole digital and IT structure work together.</i></p> <p><i>Yes, digital is shaping the company going forward. And if I may say from a total overall point of view – organizational – if I should put one word to it, it is transformation. It is simply a transformation of the entire organization. Not only thinking and working with, but actually knowing what this whole digital thing is and how can we work it into every single part of the strategy - that we have now. None of that would work without a digital strategy at the same time. So it is a transformation. That is working with something that we were not even close to working with four years ago. That it has been one of the major achievements of the PhD. It has actually contributed to leading the transformation. It is not only a technical thing. It is certainly a</i></p>	<p><i>remember it is now international. The brand was regional before.</i></p> <p><i>Yes! [Because of digital, the entire business has grown]. It has quadrupled, if not more, in that period.</i></p> <p><i>The biggest growth has been with our wholesale customers, but their growth has been a lot due to the fact that we had this project going. Otherwise we could not consult them or serve them the products and wrap it up with product data, with the whole consulting on how to bring to market, etc. So digital is an instrumental discipline in order to enable this growth.</i></p>	<p><i>about the end-user. You need to have the internal understanding as well. It all starts with your own understanding for sure!</i></p> <p><i>Sure, we generate sales online ourselves, but there are also a lot of sales generated because of the branding via digital platforms. And that is hard to quantify. So apart from sales it's also about securing brand equity.</i></p> <p><i>I had never imagined that it would all happen so rapidly – and that we would take on such a big digital responsibility for our [B2B] customers</i></p> <p><i>In the good old days it was all men's fight on the road. There were a lot of good brands, so it was about hiring the best sales man to sell our good brand. Today, it's about the digital department. It has become a competitive advantage for a brand.</i></p> <p><i>Had we not invested in digital knowhow, experience and skilled employees then our value chain would not be complete. We would have had a large gap – and no matter what we did in terms of products and marketing campaign it would not have an impact if it was not executed online.</i></p>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

	<i>transformational and organizational thing.</i>		
Validation of the phases / transformation from single to omni channel	<p><i>Yes, but I can say that going from single to multi has not been straightforward. We have gone far beyond what we thought that we could achieve in the digital area. We are now moving into an omni – even though it is quite a big step for us to do and I actually think that it will take some more time to get the whole organization ready for omni. But there is no doubt that we now have an organization that is motivated to do it. And who in many ways are prepared to do it. Even so that we have the digital organization with experts working with this. And maybe even more so, we have enabled a motivation and knowledge in the total organization of the importance of the digital launches that we are doing – pushing forward omnichannel. So in many aspects we are actually in the omnichannel position right now, but in many we still have some way to go. But we know what to do and it's properly a question of expanding and just doing better what we are doing already.</i></p>	<p><i>Yes. It's good simplistic overview of our journey. I will say quite honestly, we did not have that in mind when we began this journey. But this is what I said was one of the benefits: knowledge. We have learned as a company on all levels from CEO down to sales assistants. And yes this is actually true looking back. This is the journey we have been on from a very singlechannel focused company, driven by wholesale regionally, to multichannel, selling direct and enabling wholesale customers to buy differently – and more – and then to omnichannel now. We still have a way to go, but it is what we are investing in and operating within, so I would say, yes we are in the omnichannel era right now.</i></p>	<p><i>Yes it is correct. And there are a lot more to every heading than what you have written here. I can sometimes be a little shocked to see where we came from.</i></p> <p><i>We are actually just about to taste the [omnichannel] experience. Not just delivering the system, but also deploying it. In principle we could get data from everywhere. When it is digital it gets more factual. The market is judging us real-time. Before it was just based on [our own] sensing.</i></p> <p><i>You have facilitated, coordinated and developed a setup, which has made Sales – me and my people – stronger. Direct and indirect. This thing about walking hand in hand it's only really good if you are making each other more attractive. But in this case it is actually Digital which has made Sales more attractive.</i></p> <p><i>You have helped secure that the development didn't go to slow or to fast. You didn't enter as a nerd, but as an expert, and you were able to break it down so that it was easy for us, who are not part of the digital world, to understand the why.</i></p> <p><i>You made it user-friendly and made us understand that together we are stronger. And why Digital is making Sales stronger.</i></p> <p><i>Desk research is far from reality [...] You are part of reality and have real life experience. I clearly remember your first presentation. You came tumbling down from the sky and knew everything about the market. That was really important for us. It meant that we didn't need to spend time and energy on teaching you what reality looks like for us.</i></p> <p><i>I'm actually going to miss these reflection sessions. It's like a "Christiania" space where you</i></p>

			<i>can talk about what has happened and where we are going. You realize things as you are speaking..</i>
--	--	--	----------------------------------------------------------------------------------------------------------

Appendix D: Digital 2016 Targets and Plans

Digital Targets

B2B Platform and Key Account Support

Target/VP:

1. To develop our B2B platform into an effective sales pushing platform.
By 2016 approx 18% (ex pre-order) of our total orders will be placed on the B2B platform and shall aim to reach a GM at minimum the same level as total GM.
2. To become our key accounts' preferred digital supplier by supporting them with best-in-class product data and digital marketing and activations tools.

Why:

1. The B2B platform is highly effective for lowering staff cost and for analysing and supporting customers.
2. Most of our offline Key Accounts are only now embracing ecommerce, there is therefore an USP in helping them to get up to speed with our pure online key accounts like Smartguy and Zalando. Furthermore, this is where we will get millions of eyeballs on hummel products, and hence where they should be displayed at their best.

B2C Webshop and Global OBOV hummel.net



Target/VP: Offering an aligned hummel OBOV experience online and availability for the global consumer.

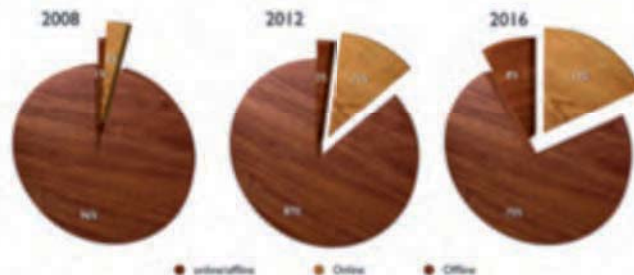
Why: To strengthen and control the hummel brand, to meet customer expectations for product availability, and to set a global pricing benchmark. hummel.net will as such be the main hub for brand and product, which will be syndicated into other on&offline sales channels.

Product Data

Target/VP: Delivering comprehensive high quality data around each of our products.

Why: In 2008 approx 4% of our products were sold online. In 2012 it's around 13%. By 2016 we expect it to be closer to 25%.

This means that 25% of consumers will not see or touch our products in real life before they buy it. Furthermore 90% of consumers will search online first-before, while or after – a product buy. It is therefore crucial to show quality pictures, videos and descriptions, so that they feel comfortable buying hummel products regardless of the retail format.



Social Media

Target/VP: To reach 1 million fans across our social media platforms, and to secure 200.000 of these fans in our own controlled database.

Why: To be able to directly reach a large engaged audience when promoting our products and brand, in ways which will give hummel the best possible ROI



Figure 16 Digital Targets 2016

Digital Plans

B2B Platform and Key Account Support

Plan:

1. To merge B2B and B2C platforms in order to ensure optimised investment and competence development.
2. Develop guidelines, B2B news, Brand Button, QR web app, and best-in-class product data, as well as staff training, digital marketing and activations tools.

Resources:

1. Technical development, maintenance and support.
2. Personnel in-house: B2B Specialist, B2B coordinator, "sales person"
3. In-store commerce: Virtual wall/tablets soft&hardware + installation
4. Education of retailers: B2B system and in-store commerce
5. Extern resources: Digital agencies for development, Analytics and Newsletters.



B2C Webshop and Global OBOV hummel.net

Plan: Take ownership of and ensuring a consistent and strong brand platform by rolling out hummel.net globally with local content and full assortment for sale. Service our country partners with license and own stock products for view and sale on hummel.net

Resources:

1. Technical development, maintenance and support
2. Personnel in-house: B2C specialist, B2C coordinator
3. Extern resources: Digital agencies for development, Analytics & SEO, Newsletters and merchandising



Product Data

Plan: Create comprehensive high quality data around each of our products, and gather the data in one central hub, from which it can be fed/syndicated to various platforms and sites. For this we will create:

- 1 packshot
- 5 detail shots
- 3D image
- Catwalk video
- Size and fit guide
- 3 lifestyle/model images
- B2C sales and product info text
- Collection video and descriptions
- Customer reviews and Instagram pictures

Resources:

In-house video/photo studio or increased outsourced creation!
Copywriter, photographer, video photographer/editor, Stylist, house models
A "PIM" or related system for all rich content management



Social Media



Plan: To activate our sponsorships and key accounts, through competitions, fan engagement, games and advertising

Resources:

Personnel in-house: Online communicator & Online assistant
Extern resources: SM CMS and support from digital agencies.



Figure 17 Digital Plans 2016

TITLER I PH.D.SERIEN:

– *a Field Study of the Rise and Fall of a Bottom-Up Process*

2004

1. Martin Grieger
Internet-based Electronic Marketplaces and Supply Chain Management
2. Thomas Basbøll
*LIKENESS
A Philosophical Investigation*
3. Morten Knudsen
*Beslutningens vaklen
En systemteoretisk analyse af moderniseringen af et amtskommunalt sundhedsvæsen 1980-2000*
4. Lars Bo Jeppesen
*Organizing Consumer Innovation
A product development strategy that is based on online communities and allows some firms to benefit from a distributed process of innovation by consumers*
5. Barbara Dragsted
*SEGMENTATION IN TRANSLATION AND TRANSLATION MEMORY SYSTEMS
An empirical investigation of cognitive segmentation and effects of integrating a TM system into the translation process*
6. Jeanet Hardis
*Sociale partnerskaber
Et socialkonstruktivistisk casestudie af partnerskabsaktørers virkelighedsopfattelse mellem identitet og legitimitet*
7. Henriette Hallberg Thygesen
System Dynamics in Action
8. Carsten Mejer Plath
Strategisk Økonomistyring
9. Annemette Kjærgaard
Knowledge Management as Internal Corporate Venturing
10. Knut Arne Hovdal
*De professionelle i endring
Norsk ph.d., ej til salg gennem Samfundslitteratur*
11. Søren Jeppesen
*Environmental Practices and Greening Strategies in Small Manufacturing Enterprises in South Africa
– A Critical Realist Approach*
12. Lars Frode Frederiksen
*Industriel forskningsledelse
– på sporet af mønstre og samarbejde i danske forskningsintensive virksomheder*
13. Martin Jes Iversen
*The Governance of GN Great Nordic
– in an age of strategic and structural transitions 1939-1988*
14. Lars Pynt Andersen
*The Rhetorical Strategies of Danish TV Advertising
A study of the first fifteen years with special emphasis on genre and irony*
15. Jakob Rasmussen
Business Perspectives on E-learning
16. Sof Thrane
*The Social and Economic Dynamics of Networks
– a Weberian Analysis of Three Formalised Horizontal Networks*
17. Lene Nielsen
Engaging Personas and Narrative Scenarios – a study on how a user-centered approach influenced the perception of the design process in the e-business group at AstraZeneca
18. S.J Valstad
*Organisationsidentitet
Norsk ph.d., ej til salg gennem Samfundslitteratur*

19. Thomas Lyse Hansen
Six Essays on Pricing and Weather risk in Energy Markets
 20. Sabine Madsen
Emerging Methods – An Interpretive Study of ISD Methods in Practice
 21. Evis Sinani
The Impact of Foreign Direct Investment on Efficiency, Productivity Growth and Trade: An Empirical Investigation
 22. Bent Meier Sørensen
Making Events Work Or, How to Multiply Your Crisis
 23. Pernille Schnoor
Brand Ethos
Om troværdige brand- og virksomhedsidentiteter i et retorisk og diskursteoretisk perspektiv
 24. Sidsel Fabech
Von welchem Österreich ist hier die Rede?
Diskursive forhandlinger og magtkampe mellem rivaliserende nationale identitetskonstruktioner i østrigske pressediskurser
 25. Klavs Odgaard Christensen
Sprogpolitik og identitetsdannelse i flersprogede forbundsstater
Et komparativt studie af Schweiz og Canada
 26. Dana B. Minbaeva
Human Resource Practices and Knowledge Transfer in Multinational Corporations
 27. Holger Højlund
Markedets politiske fornuft
Et studie af velfærdens organisering i perioden 1990-2003
 28. Christine Mølgaard Frandsen
A.s erfaring
Om mellemværendets praktik i en transformation af mennesket og subjektiviteten
 29. Sine Nørholm Just
The Constitution of Meaning – A Meaningful Constitution? Legitimacy, identity, and public opinion in the debate on the future of Europe
- 2005**
1. Claus J. Varnes
Managing product innovation through rules – The role of formal and structured methods in product development
 2. Helle Hedegaard Hein
Mellem konflikt og konsensus – Dialogudvikling på hospitalsklinikker
 3. Axel Rosenø
Customer Value Driven Product Innovation – A Study of Market Learning in New Product Development
 4. Søren Buhl Pedersen
Making space
An outline of place branding
 5. Camilla Funck Ellehave
Differences that Matter
An analysis of practices of gender and organizing in contemporary work-places
 6. Rigmor Madeleine Lond
Styring af kommunale forvaltninger
 7. Mette Aagaard Andreassen
Supply Chain versus Supply Chain Benchmarking as a Means to Managing Supply Chains
 8. Caroline Aggestam-Pontoppidan
From an idea to a standard
The UN and the global governance of accountants' competence
 9. Norsk ph.d.
 10. Vivienne Heng Ker-ni
An Experimental Field Study on the

- Effectiveness of Grocer Media Advertising*
Measuring Ad Recall and Recognition, Purchase Intentions and Short-Term Sales
11. Allan Mortensen
Essays on the Pricing of Corporate Bonds and Credit Derivatives
12. Remo Stefano Chiari
Figure che fanno conoscere
Itinerario sull'idea del valore cognitivo e espressivo della metafora e di altri tropi da Aristotele e da Vico fino al cognitivismo contemporaneo
13. Anders McIlquham-Schmidt
Strategic Planning and Corporate Performance
An integrative research review and a meta-analysis of the strategic planning and corporate performance literature from 1956 to 2003
14. Jens Geersbro
The TDF – PMI Case
Making Sense of the Dynamics of Business Relationships and Networks
15. Mette Andersen
Corporate Social Responsibility in Global Supply Chains
Understanding the uniqueness of firm behaviour
16. Eva Boxenbaum
Institutional Genesis: Micro – Dynamic Foundations of Institutional Change
17. Peter Lund-Thomsen
Capacity Development, Environmental Justice NGOs, and Governance: The Case of South Africa
18. Signe Jarlov
Konstruktioner af offentlig ledelse
19. Lars Stæhr Jensen
Vocabulary Knowledge and Listening Comprehension in English as a Foreign Language
- An empirical study employing data elicited from Danish EFL learners*
20. Christian Nielsen
Essays on Business Reporting
Production and consumption of strategic information in the market for information
21. Marianne Thejls Fischer
Egos and Ethics of Management Consultants
22. Annie Bekke Kjær
Performance management i Process-innovation
– belyst i et social-konstruktivistisk perspektiv
23. Suzanne Dee Pedersen
GENTAGELSENS METAMORFOSE
Om organisering af den kreative gøren i den kunstneriske arbejdspraksis
24. Benedikte Dorte Rosenbrink
Revenue Management
Økonomiske, konkurrencemæssige & organisatoriske konsekvenser
25. Thomas Riise Johansen
Written Accounts and Verbal Accounts
The Danish Case of Accounting and Accountability to Employees
26. Ann Fogelgren-Pedersen
The Mobile Internet: Pioneering Users' Adoption Decisions
27. Birgitte Rasmussen
Ledelse i fællesskab – de tillidsvalgte fornyende rolle
28. Gitte Thit Nielsen
Remerger
– skabende ledelseskrafter i fusion og opkøb
29. Carmine Gioia
A MICROECONOMETRIC ANALYSIS OF MERGERS AND ACQUISITIONS

30. Ole Hinz
Den effektive forandringsleder: pilot, pædagog eller politiker?
Et studie i arbejdslederens meningstilskrivninger i forbindelse med vellykket gennemførelse af ledelsesinitierede forandringsprojekter
31. Kjell-Åge Gotvassli
Et praksisbasert perspektiv på dynamiske læringsnettverk i toppidretten
Norsk ph.d., ej til salg gennem Samfundslitteratur
32. Henriette Langstrup Nielsen
Linking Healthcare
An inquiry into the changing performances of web-based technology for asthma monitoring
33. Karin Tweddell Levinsen
Virtuel Uddannelsespraksis
Master i IKT og Læring – et casestudie i hvordan proaktiv proceshåndtering kan forbedre praksis i virtuelle læringsmiljøer
34. Anika Liversage
Finding a Path
Labour Market Life Stories of Immigrant Professionals
35. Kasper Elmquist Jørgensen
Studier i samspillet mellem stat og erhvervsliv i Danmark under 1. verdenskrig
36. Finn Janning
A DIFFERENT STORY
Seduction, Conquest and Discovery
37. Patricia Ann Plackett
Strategic Management of the Radical Innovation Process
Leveraging Social Capital for Market Uncertainty Management
2. Niels Rom-Poulsen
Essays in Computational Finance
3. Tina Brandt Husman
Organisational Capabilities, Competitive Advantage & Project-Based Organisations
The Case of Advertising and Creative Good Production
4. Mette Rosenkrands Johansen
Practice at the top
– how top managers mobilise and use non-financial performance measures
5. Eva Parum
Corporate governance som strategisk kommunikations- og ledelsesværktøj
6. Susan Aagaard Petersen
Culture's Influence on Performance Management: The Case of a Danish Company in China
7. Thomas Nicolai Pedersen
The Discursive Constitution of Organizational Governance – Between unity and differentiation
The Case of the governance of environmental risks by World Bank environmental staff
8. Cynthia Selin
Volatile Visions: Transactons in Anticipatory Knowledge
9. Jesper Banghøj
Financial Accounting Information and Compensation in Danish Companies
10. Mikkel Lucas Overby
Strategic Alliances in Emerging High-Tech Markets: What's the Difference and does it Matter?
11. Tine Aage
External Information Acquisition of Industrial Districts and the Impact of Different Knowledge Creation Dimensions

2006

1. Christian Vintergaard
Early Phases of Corporate Venturing

- A case study of the Fashion and Design Branch of the Industrial District of Montebelluna, NE Italy*
12. Mikkel Flyverbom
Making the Global Information Society Governable
On the Governmentality of Multi-Stakeholder Networks
 13. Anette Grønning
Personen bag
Tilstedevær i e-mail som interaktionsform mellem kunde og medarbejder i dansk forsikringskontekst
 14. Jørn Helder
One Company – One Language?
The NN-case
 15. Lars Bjerregaard Mikkelsen
Differing perceptions of customer value
Development and application of a tool for mapping perceptions of customer value at both ends of customer-supplier dyads in industrial markets
 16. Lise Granerud
Exploring Learning
Technological learning within small manufacturers in South Africa
 17. Esben Rahbek Pedersen
Between Hopes and Realities: Reflections on the Promises and Practices of Corporate Social Responsibility (CSR)
 18. Ramona Samson
The Cultural Integration Model and European Transformation.
The Case of Romania
- 2007**
1. Jakob Vestergaard
Discipline in The Global Economy
Panopticism and the Post-Washington Consensus
 2. Heidi Lund Hansen
Spaces for learning and working
A qualitative study of change of work, management, vehicles of power and social practices in open offices
 3. Sudhanshu Rai
Exploring the internal dynamics of software development teams during user analysis
A tension enabled Institutionalization Model; "Where process becomes the objective"
 4. Norsk ph.d.
Ej til salg gennem Samfundslitteratur
 5. Serden Ozcan
EXPLORING HETEROGENEITY IN ORGANIZATIONAL ACTIONS AND OUTCOMES
A Behavioural Perspective
 6. Kim Sundtoft Hald
Inter-organizational Performance Measurement and Management in Action
– An Ethnography on the Construction of Management, Identity and Relationships
 7. Tobias Lindeberg
Evaluative Technologies
Quality and the Multiplicity of Performance
 8. Merete Wedell-Wedellsborg
Den globale soldat
Identitetsdannelse og identitetsledelse i multinationale militære organisationer
 9. Lars Frederiksen
Open Innovation Business Models
Innovation in firm-hosted online user communities and inter-firm project ventures in the music industry
– A collection of essays
 10. Jonas Gabrielsen
Retorisk toposlære – fra statisk 'sted' til persuasiv aktivitet

11. Christian Moldt-Jørgensen
Fra meningsløs til meningsfuld evaluering.
Anvendelsen af studentertilfredsheds-målinger på de korte og mellemlange videregående uddannelser set fra et psykodynamisk systemperspektiv
12. Ping Gao
Extending the application of actor-network theory
Cases of innovation in the telecommunications industry
13. Peter Mejlby
Frihed og fængsel, en del af den samme drøm?
Et phronetisk baseret casestudie af frigørelsens og kontrollens sam-eksistens i værdibaseret ledelse!
14. Kristina Birch
Statistical Modelling in Marketing
15. Signe Poulsen
Sense and sensibility:
The language of emotional appeals in insurance marketing
16. Anders Bjerre Trolle
Essays on derivatives pricing and dynamic asset allocation
17. Peter Feldhütter
Empirical Studies of Bond and Credit Markets
18. Jens Henrik Eggert Christensen
Default and Recovery Risk Modeling and Estimation
19. Maria Theresa Larsen
Academic Enterprise: A New Mission for Universities or a Contradiction in Terms?
Four papers on the long-term implications of increasing industry involvement and commercialization in academia
20. Morten Wellendorf
Postimplementering af teknologi i den offentlige forvaltning
Analyser af en organisations kontinuerlige arbejde med informations-teknologi
21. Ekaterina Mhaanna
Concept Relations for Terminological Process Analysis
22. Stefan Ring Thorbjørnsen
Forsvaret i forandring
Et studie i officerers kapabiliteter under påvirkning af omverdenens forandringspres mod øget styring og læring
23. Christa Breum Amhøj
Det selvskabte medlemskab om managementsstaten, dens styringsteknologier og indbyggere
24. Karoline Bromose
Between Technological Turbulence and Operational Stability
– An empirical case study of corporate venturing in TDC
25. Susanne Justesen
Navigating the Paradoxes of Diversity in Innovation Practice
– A Longitudinal study of six very different innovation processes – in practice
26. Luise Noring Henler
Conceptualising successful supply chain partnerships
– Viewing supply chain partnerships from an organisational culture perspective
27. Mark Mau
Kampen om telefonen
Det danske telefonvæsen under den tyske besættelse 1940-45
28. Jakob Halskov
The semiautomatic expansion of existing terminological ontologies using knowledge patterns discovered

- on the WWW – an implementation and evaluation*
29. Gergana Koleva
European Policy Instruments Beyond Networks and Structure: The Innovative Medicines Initiative
 30. Christian Geisler Asmussen
Global Strategy and International Diversity: A Double-Edged Sword?
 31. Christina Holm-Petersen
*Stolthed og fordom
Kultur- og identitetsarbejde ved skabelsen af en ny sengeafdeling gennem fusion*
 32. Hans Peter Olsen
*Hybrid Governance of Standardized States
Causes and Contours of the Global Regulation of Government Auditing*
 33. Lars Bøge Sørensen
Risk Management in the Supply Chain
 34. Peter Aagaard
*Det unikkes dynamikker
De institutionelle mulighedsbetingelser bag den individuelle udforskning i professionelt og frivilligt arbejde*
 35. Yun Mi Antorini
*Brand Community Innovation
An Intrinsic Case Study of the Adult Fans of LEGO Community*
 36. Joachim Lynggaard Boll
*Labor Related Corporate Social Performance in Denmark
Organizational and Institutional Perspectives*
 3. Marius Brostrøm Kousgaard
*Tid til kvalitetsmåling?
– Studier af indrulleringsprocesser i forbindelse med introduktionen af kliniske kvalitetsdatabaser i speciallægepraksissektoren*
 4. Irene Skovgaard Smith
*Management Consulting in Action
Value creation and ambiguity in client-consultant relations*
 5. Anders Rom
*Management accounting and integrated information systems
How to exploit the potential for management accounting of information technology*
 6. Marina Candi
Aesthetic Design as an Element of Service Innovation in New Technology-based Firms
 7. Morten Schnack
*Teknologi og tværfaglighed
– en analyse af diskussionen omkring indførelse af EPJ på en hospitalsafdeling*
 8. Helene Balslev Clausen
Juntos pero no revueltos – un estudio sobre emigrantes norteamericanos en un pueblo mexicano
 9. Lise Justesen
*Kunsten at skrive revisionsrapporter.
En beretning om forvaltningsrevisionsens beretninger*
 10. Michael E. Hansen
The politics of corporate responsibility: CSR and the governance of child labor and core labor rights in the 1990s

2008

1. Frederik Christian Vinten
Essays on Private Equity
2. Jesper Clement
Visual Influence of Packaging Design on In-Store Buying Decisions
11. Anne Roepstorff
Holdning for handling – en etnologisk undersøgelse af Virksomheders Sociale Ansvar/CSR

12. Claus Bajlum
Essays on Credit Risk and Credit Derivatives
 13. Anders Bojesen
The Performative Power of Competence – An Inquiry into Subjectivity and Social Technologies at Work
 14. Satu Reijonen
*Green and Fragile
A Study on Markets and the Natural Environment*
 15. Ilduara Busta
*Corporate Governance in Banking
A European Study*
 16. Kristian Anders Hvass
*A Boolean Analysis Predicting Industry Change: Innovation, Imitation & Business Models
The Winning Hybrid: A case study of isomorphism in the airline industry*
 17. Trine Paludan
*De uvidende og de udviklingsparate
Identitet som mulighed og restriktion
blandt fabriksarbejdere på det aftayloriserede fabriksgulv*
 18. Kristian Jakobsen
Foreign market entry in transition economies: Entry timing and mode choice
 19. Jakob Elming
Syntactic reordering in statistical machine translation
 20. Lars Brømsøe Termansen
*Regional Computable General Equilibrium Models for Denmark
Three papers laying the foundation for regional CGE models with agglomeration characteristics*
 21. Mia Reinholdt
The Motivational Foundations of Knowledge Sharing
 22. Frederikke Krogh-Meibom
*The Co-Evolution of Institutions and Technology
– A Neo-Institutional Understanding of Change Processes within the Business Press – the Case Study of Financial Times*
 23. Peter D. Ørberg Jensen
OFFSHORING OF ADVANCED AND HIGH-VALUE TECHNICAL SERVICES: ANTECEDENTS, PROCESS DYNAMICS AND FIRMLEVEL IMPACTS
 24. Pham Thi Song Hanh
Functional Upgrading, Relational Capability and Export Performance of Vietnamese Wood Furniture Producers
 25. Mads Vangkilde
*Why wait?
An Exploration of first-mover advantages among Danish e-grocers through a resource perspective*
 26. Hubert Buch-Hansen
*Rethinking the History of European Level Merger Control
A Critical Political Economy Perspective*
- 2009**
1. Vivian Lindhardsen
From Independent Ratings to Communal Ratings: A Study of CWA Raters' Decision-Making Behaviours
 2. Guðrið Weihe
Public-Private Partnerships: Meaning and Practice
 3. Chris Nøkkentved
*Enabling Supply Networks with Collaborative Information Infrastructures
An Empirical Investigation of Business Model Innovation in Supplier Relationship Management*
 4. Sara Louise Muhr
Wound, Interrupted – On the Vulnerability of Diversity Management

5. Christine Sestoft
*Forbrugeradfærd i et Stats- og Livs-
formsteoretisk perspektiv*
6. Michael Pedersen
*Tune in, Breakdown, and Reboot: On
the production of the stress-fit self-
managing employee*
7. Salla Lutz
*Position and Reposition in Networks
– Exemplified by the Transformation of
the Danish Pine Furniture Manu-
facturers*
8. Jens Forssbæck
*Essays on market discipline in
commercial and central banking*
9. Tine Murphy
*Sense from Silence – A Basis for Orga-
nised Action
How do Sensemaking Processes with
Minimal Sharing Relate to the Repro-
duction of Organised Action?*
10. Sara Malou Strandvad
*Inspirations for a new sociology of art:
A sociomaterial study of development
processes in the Danish film industry*
11. Nicolaas Mouton
*On the evolution of social scientific
metaphors:
A cognitive-historical enquiry into the
divergent trajectories of the idea that
collective entities – states and societies,
cities and corporations – are biological
organisms.*
12. Lars Andreas Knutsen
*Mobile Data Services:
Shaping of user engagements*
13. Nikolaos Theodoros Korfiatis
*Information Exchange and Behavior
A Multi-method Inquiry on Online
Communities*
14. Jens Albæk
*Forestillinger om kvalitet og tværfaglig-
hed på sygehuse
– skabelse af forestillinger i læge- og
plejegrupperne angående relevans af
nye idéer om kvalitetsudvikling gen-
nem tolkningsprocesser*
15. Maja Lotz
*The Business of Co-Creation – and the
Co-Creation of Business*
16. Gitte P. Jakobsen
*Narrative Construction of Leader Iden-
tity in a Leader Development Program
Context*
17. Dorte Hermansen
*“Living the brand” som en brandorien-
teret dialogisk praksis:
Om udvikling af medarbejdernes
brandorienterede dømmekraft*
18. Aseem Kinra
*Supply Chain (logistics) Environmental
Complexity*
19. Michael Nørager
*How to manage SMEs through the
transformation from non innovative to
innovative?*
20. Kristin Wallevik
*Corporate Governance in Family Firms
The Norwegian Maritime Sector*
21. Bo Hansen Hansen
*Beyond the Process
Enriching Software Process Improve-
ment with Knowledge Management*
22. Annemette Skot-Hansen
*Franske adjektivisk afledte adverbier,
der tager præpositionssyntagmer ind-
ledt med præpositionen à som argu-
menter
En valensgrammatisk undersøgelse*
23. Line Gry Knudsen
*Collaborative R&D Capabilities
In Search of Micro-Foundations*

- | | | | |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 24. | Christian Scheuer
<i>Employers meet employees
Essays on sorting and globalization</i> | | <i>End User Participation between Processes of Organizational and Architectural Design</i> |
| 25. | Rasmus Johnsen
<i>The Great Health of Melancholy
A Study of the Pathologies of Performativity</i> | 7. | Rex Degnegaard
<i>Strategic Change Management
Change Management Challenges in the Danish Police Reform</i> |
| 26. | Ha Thi Van Pham
<i>Internationalization, Competitiveness Enhancement and Export Performance of Emerging Market Firms: Evidence from Vietnam</i> | 8. | Ulrik Schultz Brix
<i>Værdi i rekruttering – den sikre beslutning
En pragmatisk analyse af perception og synliggørelse af værdi i rekrutterings- og udvælgelsesarbejdet</i> |
| 27. | Henriette Balieu
<i>Kontrolbegrebets betydning for kausalalternationen i spansk
En kognitiv-typologisk analyse</i> | 9. | Jan Ole Similå
<i>Kontraktsledelse
Relasjonen mellom virksomhetsledelse og kontraktshåndtering, belyst via fire norske virksomheter</i> |
- 2010**
- | | | | |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | Yen Tran
<i>Organizing Innovation in Turbulent Fashion Market
Four papers on how fashion firms create and appropriate innovation value</i> | 10. | Susanne Boch Waldorff
<i>Emerging Organizations: In between local translation, institutional logics and discourse</i> |
| 2. | Anders Raastrup Kristensen
<i>Metaphysical Labour
Flexibility, Performance and Commitment in Work-Life Management</i> | 11. | Brian Kane
<i>Performance Talk
Next Generation Management of Organizational Performance</i> |
| 3. | Margrét Sigrún Sigurdardóttir
<i>Dependently independent
Co-existence of institutional logics in the recorded music industry</i> | 12. | Lars Ohnemus
<i>Brand Thrust: Strategic Branding and Shareholder Value
An Empirical Reconciliation of two Critical Concepts</i> |
| 4. | Ásta Dis Óladóttir
<i>Internationalization from a small domestic base:
An empirical analysis of Economics and Management</i> | 13. | Jesper Schlamovitz
<i>Håndtering af usikkerhed i film- og byggeprojekter</i> |
| 5. | Christine Secher
<i>E-deltagelse i praksis – politikernes og forvaltningens medkonstruktion og konsekvenserne heraf</i> | 14. | Tommy Moesby-Jensen
<i>Det faktiske livs forbindtlighed
Følsomt informeret, ny-aristotelisk
ἦθος-tænkning hos Martin Heidegger</i> |
| 6. | Marianne Stang Våland
<i>What we talk about when we talk about space:</i> | 15. | Christian Fich
<i>Two Nations Divided by Common Values
French National Habitus and the Rejection of American Power</i> |

16. Peter Beyer
Processer, sammenhængskraft og fleksibilitet
Et empirisk casestudie af omstillingsforløb i fire virksomheder
17. Adam Buchhorn
Markets of Good Intentions
Constructing and Organizing Biogas Markets Amid Fragility and Controversy
18. Cecilie K. Moesby-Jensen
Social læring og fælles praksis
Et mixed method studie, der belyser læringskonsekvenser af et lederkursus for et praksisfællesskab af offentlige mellemledere
19. Heidi Boye
Fødevarer og sundhed i sen-modernismen
– En indsigt i hyggefænomenet og de relaterede fødevarerpraksisser
20. Kristine Munkgård Pedersen
Flygtige forbindelser og midlertidige mobiliseringer
Om kulturel produktion på Roskilde Festival
21. Oliver Jacob Weber
Causes of Intercompany Harmony in Business Markets – An Empirical Investigation from a Dyad Perspective
22. Susanne Ekman
Authority and Autonomy
Paradoxes of Modern Knowledge Work
23. Anette Frey Larsen
Kvalitetsledelse på danske hospitaler
– Ledelsernes indflydelse på introduktion og vedligeholdelse af kvalitetsstrategier i det danske sundhedsvæsen
24. Toyoko Sato
Performativity and Discourse: Japanese Advertisements on the Aesthetic Education of Desire
25. Kenneth Brinch Jensen
Identifying the Last Planner System
Lean management in the construction industry
26. Javier Busquets
Orchestrating Network Behavior for Innovation
27. Luke Patey
The Power of Resistance: India's National Oil Company and International Activism in Sudan
28. Mette Vedel
Value Creation in Triadic Business Relationships. Interaction, Interconnection and Position
29. Kristian Tørning
Knowledge Management Systems in Practice – A Work Place Study
30. Qingxin Shi
An Empirical Study of Thinking Aloud
Usability Testing from a Cultural Perspective
31. Tanja Juul Christiansen
Corporate blogging: Medarbejderes kommunikative handlekraft
32. Malgorzata Ciesielska
Hybrid Organisations.
A study of the Open Source – business setting
33. Jens Dick-Nielsen
Three Essays on Corporate Bond Market Liquidity
34. Sabrina Speiermann
Modstandens Politik
Kampagnestyling i Velfærdsstaten.
En diskussion af trafikcampagners styringspotentiale
35. Julie Uldam
Fickle Commitment. Fostering political engagement in 'the flighty world of online activism'

36. Annegrete Juul Nielsen
Traveling technologies and transformations in health care
37. Athur Mühlen-Schulte
Organising Development Power and Organisational Reform in the United Nations Development Programme
38. Louise Rygaard Jonas
Branding på butiksgulvet Et case-studie af kultur- og identitets-arbejdet i Kvickly
8. Ole Helby Petersen
Public-Private Partnerships: Policy and Regulation – With Comparative and Multi-level Case Studies from Denmark and Ireland
9. Morten Krogh Petersen
'Good' Outcomes. Handling Multiplicity in Government Communication
10. Kristian Tangsgaard Hvelplund
Allocation of cognitive resources in translation - an eye-tracking and key-logging study

2011

1. Stefan Fraenkel
Key Success Factors for Sales Force Readiness during New Product Launch A Study of Product Launches in the Swedish Pharmaceutical Industry
2. Christian Plesner Rossing
International Transfer Pricing in Theory and Practice
3. Tobias Dam Hede
Samtalekunst og ledelsesdisciplin – en analyse af coachingsdiskursens genealogi og governmentality
4. Kim Pettersson
Essays on Audit Quality, Auditor Choice, and Equity Valuation
5. Henrik Merkelsen
The expert-lay controversy in risk research and management. Effects of institutional distances. Studies of risk definitions, perceptions, management and communication
6. Simon S. Torp
Employee Stock Ownership: Effect on Strategic Management and Performance
7. Mie Harder
Internal Antecedents of Management Innovation
11. Moshe Yonatany
The Internationalization Process of Digital Service Providers
12. Anne Vestergaard
Distance and Suffering Humanitarian Discourse in the age of Mediatization
13. Thorsten Mikkelsen
Personlighedens indflydelse på forretningsrelationer
14. Jane Thostrup Jagd
Hvorfor fortsætter fusionsbølgen ud-over "the tipping point"? – en empirisk analyse af information og kognitioner om fusioner
15. Gregory Gimpel
Value-driven Adoption and Consumption of Technology: Understanding Technology Decision Making
16. Thomas Stengade Sønderskov
Den nye mulighed Social innovation i en forretningsmæssig kontekst
17. Jeppe Christoffersen
Donor supported strategic alliances in developing countries
18. Vibeke Vad Baunsgaard
Dominant Ideological Modes of Rationality: Cross functional

- integration in the process of product innovation*
19. Throstur Olaf Sigurjonsson
Governance Failure and Iceland's Financial Collapse
 20. Allan Sall Tang Andersen
Essays on the modeling of risks in interest-rate and inflation markets
 21. Heidi Tscherning
Mobile Devices in Social Contexts
 22. Birgitte Gorm Hansen
Adapting in the Knowledge Economy Lateral Strategies for Scientists and Those Who Study Them
 23. Kristina Vaarst Andersen
Optimal Levels of Embeddedness The Contingent Value of Networked Collaboration
 24. Justine Grønbæk Pors
Noisy Management A History of Danish School Governing from 1970-2010
 25. Stefan Linder
Micro-foundations of Strategic Entrepreneurship Essays on Autonomous Strategic Action
 26. Xin Li
Toward an Integrative Framework of National Competitiveness An application to China
 27. Rune Thorbjørn Clausen
Værdifuld arkitektur Et eksplorativt studie af bygningers rolle i virksomheders værdiskabelse
 28. Monica Viken
Markedsundersøgelser som bevis i varemerke- og markedsføringsrett
 29. Christian Wymann
Tattooing The Economic and Artistic Constitution of a Social Phenomenon
 30. Sanne Frandsen
Productive Incoherence A Case Study of Branding and Identity Struggles in a Low-Prestige Organization
 31. Mads Stenbo Nielsen
Essays on Correlation Modelling
 32. Ivan Häuser
Følelse og sprog Etablering af en ekspressiv kategori, eksemplificeret på russisk
 33. Sebastian Schwenen
Security of Supply in Electricity Markets
- 2012**
1. Peter Holm Andreasen
The Dynamics of Procurement Management - A Complexity Approach
 2. Martin Haulrich
Data-Driven Bitext Dependency Parsing and Alignment
 3. Line Kirkegaard
Konsulent i den anden nat En undersøgelse af det intense arbejdsliv
 4. Tonny Stenheim
Decision usefulness of goodwill under IFRS
 5. Morten Lind Larsen
Produktivitet, vækst og velfærd Industrirådet og efterkrigstidens Danmark 1945 - 1958
 6. Petter Berg
Cartel Damages and Cost Asymmetries
 7. Lynn Kahle
Experiential Discourse in Marketing A methodical inquiry into practice and theory
 8. Anne Roelsgaard Obling
Management of Emotions in Accelerated Medical Relationships

9. Thomas Frandsen
Managing Modularity of Service Processes Architecture
10. Carina Christine Skovmøller
*CSR som noget særligt
Et casestudie om styring og menings-
skabelse i relation til CSR ud fra en
intern optik*
11. Michael Tell
*Fradragsbeskæring af selskabers
finansieringsudgifter
En skatteretlig analyse af SEL §§ 11,
11B og 11C*
12. Morten Holm
*Customer Profitability Measurement
Models
Their Merits and Sophistication
across Contexts*
13. Katja Joo Dyppel
*Beskatning af derivater
En analyse af dansk skatteret*
14. Esben Anton Schultz
*Essays in Labor Economics
Evidence from Danish Micro Data*
15. Carina Risvig Hansen
*"Contracts not covered, or not fully
covered, by the Public Sector Directive"*
16. Anja Svejgaard Pors
*Iværksættelse af kommunikation
- patientfigurer i hospitalets strategiske
kommunikation*
17. Frans Bévert
*Making sense of management with
logics
An ethnographic study of accountants
who become managers*
18. René Kallestrup
*The Dynamics of Bank and Sovereign
Credit Risk*
19. Brett Crawford
*Revisiting the Phenomenon of Interests
in Organizational Institutionalism
The Case of U.S. Chambers of
Commerce*
20. Mario Daniele Amore
Essays on Empirical Corporate Finance
21. Arne Stjernholm Madsen
*The evolution of innovation strategy
Studied in the context of medical
device activities at the pharmaceutical
company Novo Nordisk A/S in the
period 1980-2008*
22. Jacob Holm Hansen
*Is Social Integration Necessary for
Corporate Branding?
A study of corporate branding
strategies at Novo Nordisk*
23. Stuart Webber
*Corporate Profit Shifting and the
Multinational Enterprise*
24. Helene Ratner
*Promises of Reflexivity
Managing and Researching
Inclusive Schools*
25. Therese Strand
*The Owners and the Power: Insights
from Annual General Meetings*
26. Robert Gavin Strand
*In Praise of Corporate Social
Responsibility Bureaucracy*
27. Nina Sormunen
*Auditor's going-concern reporting
Reporting decision and content of the
report*
28. John Bang Mathiasen
*Learning within a product development
working practice:
- an understanding anchored
in pragmatism*
29. Philip Holst Riis
*Understanding Role-Oriented Enterprise
Systems: From Vendors to Customers*
30. Marie Lisa Dacanay
*Social Enterprises and the Poor
Enhancing Social Entrepreneurship and
Stakeholder Theory*

31. Fumiko Kano Glückstad
Bridging Remote Cultures: Cross-lingual concept mapping based on the information receiver's prior-knowledge
 32. Henrik Barslund Fosse
Empirical Essays in International Trade
 33. Peter Alexander Albrecht
*Foundational hybridity and its reproduction
Security sector reform in Sierra Leone*
 34. Maja Rosenstock
*CSR - hvor svært kan det være?
Kulturanalytisk casestudie om udfordringer og dilemmaer med at forankre Coops CSR-strategi*
 35. Jeanette Rasmussen
*Tweens, medier og forbrug
Et studie af 10-12 årige danske børns brug af internettet, opfattelse og forståelse af markedsføring og forbrug*
 36. Ib Tunby Gulbrandsen
*'This page is not intended for a US Audience'
A five-act spectacle on online communication, collaboration & organization.*
 37. Kasper Aalling Teilmann
Interactive Approaches to Rural Development
 38. Mette Mogensen
*The Organization(s) of Well-being and Productivity
(Re)assembling work in the Danish Post*
 39. Søren Friis Møller
*From Disinterestedness to Engagement
Towards Relational Leadership In the Cultural Sector*
 40. Nico Peter Berhausen
Management Control, Innovation and Strategic Objectives – Interactions and Convergence in Product Development Networks
 41. Balder Onarheim
*Creativity under Constraints
Creativity as Balancing 'Constrainedness'*
 42. Haoyong Zhou
Essays on Family Firms
 43. Elisabeth Naima Mikkelsen
*Making sense of organisational conflict
An empirical study of enacted sense-making in everyday conflict at work*
- 2013**
1. Jacob Lyngsie
Entrepreneurship in an Organizational Context
 2. Signe Groth-Brodersen
*Fra ledelse til selvet
En socialpsykologisk analyse af forholdet imellem selvedelse, ledelse og stress i det moderne arbejdsliv*
 3. Nis Høyrup Christensen
Shaping Markets: A Neoinstitutional Analysis of the Emerging Organizational Field of Renewable Energy in China
 4. Christian Edelvold Berg
*As a matter of size
THE IMPORTANCE OF CRITICAL MASS AND THE CONSEQUENCES OF SCARCITY FOR TELEVISION MARKETS*
 5. Christine D. Isakson
*Coworker Influence and Labor Mobility
Essays on Turnover, Entrepreneurship and Location Choice in the Danish Maritime Industry*
 6. Niels Joseph Jerne Lennon
*Accounting Qualities in Practice
Rhizomatic stories of representational faithfulness, decision making and control*
 7. Shannon O'Donnell
*Making Ensemble Possible
How special groups organize for collaborative creativity in conditions of spatial variability and distance*

8. Robert W. D. Veitch
Access Decisions in a Partly-Digital World
Comparing Digital Piracy and Legal Modes for Film and Music
9. Marie Mathiesen
Making Strategy Work
An Organizational Ethnography
10. Arisa Shollo
The role of business intelligence in organizational decision-making
11. Mia Kaspersen
The construction of social and environmental reporting
12. Marcus Møller Larsen
The organizational design of offshoring
13. Mette Ohm Rørdam
EU Law on Food Naming
The prohibition against misleading names in an internal market context
14. Hans Peter Rasmussen
GIV EN GED!
Kan giver-idealiteter forklare støtte til velgørenhed og understøtte relationsopbygning?
15. Ruben Schachtenhaufen
Fonetisk reduktion i dansk
16. Peter Koerver Schmidt
Dansk CFC-beskatning
I et internationalt og komparativt perspektiv
17. Morten Froholdt
Strategi i den offentlige sektor
En kortlægning af styringsmæssig kontekst, strategisk tilgang, samt anvendte redskaber og teknologier for udvalgte danske statslige styrelser
18. Annette Camilla Sjørup
Cognitive effort in metaphor translation
An eye-tracking and key-logging study
19. Tamara Stucchi
The Internationalization of Emerging Market Firms: A Context-Specific Study
20. Thomas Lopdrup-Hjorth
"Let's Go Outside": The Value of Co-Creation
21. Ana Alačovska
Genre and Autonomy in Cultural Production
The case of travel guidebook production
22. Marius Gudmand-Høyer
Stemningssindssygdommenes historie i det 19. århundrede
Omtydningen af melankolien og manien som bipolære stemningslidelser i dansk sammenhæng under hensyn til dannelsen af det moderne følelseslivs relative autonomi.
En problematiserings- og erfarings-analytisk undersøgelse
23. Lichen Alex Yu
Fabricating an S&OP Process
Circulating References and Matters of Concern
24. Esben Alfort
The Expression of a Need
Understanding search
25. Trine Pallesen
Assembling Markets for Wind Power
An Inquiry into the Making of Market Devices
26. Anders Koed Madsen
Web-Visions
Repurposing digital traces to organize social attention
27. Lærke Højgaard Christiansen
BREWING ORGANIZATIONAL RESPONSES TO INSTITUTIONAL LOGICS
28. Tommy Kjær Lassen
EGENTLIG SELVLEDELSE
En ledelsesfilosofisk afhandling om selvledelsens paradoksale dynamik og eksistentielle engagement

29. Morten Rossing
Local Adaption and Meaning Creation in Performance Appraisal
 30. Søren Obed Madsen
*Lederen som oversætter
Et oversættelsesteoretisk perspektiv på strategisk arbejde*
 31. Thomas Høgenhaven
*Open Government Communities
Does Design Affect Participation?*
 32. Kirstine Zinck Pedersen
*Failsafe Organizing?
A Pragmatic Stance on Patient Safety*
 33. Anne Petersen
*Hverdagslogikker i psykiatrisk arbejde
En institutionsetnografisk undersøgelse af hverdagen i psykiatriske organisationer*
 34. Didde Maria Humle
Fortællinger om arbejde
 35. Mark Holst-Mikkelsen
*Strategieksekvering i praksis
– barrierer og muligheder!*
 36. Malek Maalouf
*Sustaining lean
Strategies for dealing with organizational paradoxes*
 37. Nicolaj Tofte Brenneche
*Systemic Innovation In The Making
The Social Productivity of Cartographic Crisis and Transitions in the Case of SEEIT*
 38. Morten Gylling
*The Structure of Discourse
A Corpus-Based Cross-Linguistic Study*
 39. Binzhang YANG
*Urban Green Spaces for Quality Life
- Case Study: the landscape architecture for people in Copenhagen*
 40. Michael Friis Pedersen
*Finance and Organization:
The Implications for Whole Farm Risk Management*
 41. Even Fallan
Issues on supply and demand for environmental accounting information
 42. Ather Nawaz
*Website user experience
A cross-cultural study of the relation between users' cognitive style, context of use, and information architecture of local websites*
 43. Karin Beukel
The Determinants for Creating Valuable Inventions
 44. Arjan Markus
*External Knowledge Sourcing and Firm Innovation
Essays on the Micro-Foundations of Firms' Search for Innovation*
- 2014**
1. Solon Moreira
Four Essays on Technology Licensing and Firm Innovation
 2. Karin Strzeletz Ivertsen
*Partnership Drift in Innovation Processes
A study of the Think City electric car development*
 3. Kathrine Hoffmann Pii
Responsibility Flows in Patient-centred Prevention
 4. Jane Bjørn Vedel
*Managing Strategic Research
An empirical analysis of science-industry collaboration in a pharmaceutical company*
 5. Martin Gylling
*Processuel strategi i organisationer
Monografi om dobbeltheden i tænkning af strategi, dels som vidensfelt i organisationsteori, dels som kunstnerisk tilgang til at skabe i erhvervsmæssig innovation*

6. Linne Marie Lauesen
*Corporate Social Responsibility in the Water Sector:
How Material Practices and their Symbolic and Physical Meanings Form a Colonising Logic*
7. Maggie Qiuzhu Mei
*LEARNING TO INNOVATE:
The role of ambidexterity, standard, and decision process*
8. Inger Hædt-Rasmussen
*Developing Identity for Lawyers
Towards Sustainable Lawyering*
9. Sebastian Fux
Essays on Return Predictability and Term Structure Modelling
10. Thorbjørn N. M. Lund-Poulsen
Essays on Value Based Management
11. Oana Brindusa Albu
*Transparency in Organizing:
A Performative Approach*
12. Lena Olaison
Entrepreneurship at the limits
13. Hanne Sørum
*DRESSED FOR WEB SUCCESS?
An Empirical Study of Website Quality in the Public Sector*
14. Lasse Folke Henriksen
*Knowing networks
How experts shape transnational governance*
15. Maria Halbinger
*Entrepreneurial Individuals
Empirical Investigations into Entrepreneurial Activities of Hackers and Makers*
16. Robert Spliid
Kapitalfondenes metoder og kompetencer
17. Christiane Stelling
*Public-private partnerships & the need, development and management of trusting
A processual and embedded exploration*
18. Marta Gasparin
Management of design as a translation process
19. Kåre Moberg
*Assessing the Impact of Entrepreneurship Education
From ABC to PhD*
20. Alexander Cole
*Distant neighbors
Collective learning beyond the cluster*
21. Martin Møller Boje Rasmussen
*Is Competitiveness a Question of Being Alike?
How the United Kingdom, Germany and Denmark Came to Compete through their Knowledge Regimes from 1993 to 2007*
22. Anders Ravn Sørensen
*Studies in central bank legitimacy, currency and national identity
Four cases from Danish monetary history*
23. Nina Bellak
*Can Language be Managed in International Business?
Insights into Language Choice from a Case Study of Danish and Austrian Multinational Corporations (MNCs)*
24. Rikke Kristine Nielsen
*Global Mindset as Managerial Meta-competence and Organizational Capability: Boundary-crossing Leadership Cooperation in the MNC
The Case of 'Group Mindset' in Solar A/S.*
25. Rasmus Koss Hartmann
*User Innovation inside government
Towards a critically performative foundation for inquiry*

26. Kristian Gylling Olesen
Flertydig og emergerende ledelse i folkeskolen
Et aktør-netværksteoretisk ledelsesstudie af politiske evalueringsreformers betydning for ledelse i den danske folkeskole
 27. Troels Riis Larsen
Kampen om Danmarks omdømme 1945-2010
Omdømmearbejde og omdømmepolitik
 28. Klaus Majgaard
Jagten på autenticitet i offentlig styring
 29. Ming Hua Li
Institutional Transition and Organizational Diversity: Differentiated internationalization strategies of emerging market state-owned enterprises
 30. Sofie Blinkenberg Federspiel
IT, organisation og digitalisering: Institutionelt arbejde i den kommunale digitaliseringsproces
 31. Elvi Weinreich
Hvilke offentlige ledere er der brug for når velfærdstænkningen flytter sig – er Diplomuddannelsens lederprofil svaret?
 32. Ellen Mølgaard Korsager
Self-conception and image of context in the growth of the firm – A Penrosian History of Fiberline Composites
 33. Else Skjold
The Daily Selection
 34. Marie Louise Conradsen
The Cancer Centre That Never Was The Organisation of Danish Cancer Research 1949-1992
 35. Virgilio Failla
Three Essays on the Dynamics of Entrepreneurs in the Labor Market
 36. Nicky Nedergaard
Brand-Based Innovation Relational Perspectives on Brand Logics and Design Innovation Strategies and Implementation
 37. Mads Gjedsted Nielsen
Essays in Real Estate Finance
 38. Kristin Martina Brandl
Process Perspectives on Service Offshoring
 39. Mia Rosa Koss Hartmann
In the gray zone With police in making space for creativity
 40. Karen Ingerslev
Healthcare Innovation under The Microscope Framing Boundaries of Wicked Problems
 41. Tim Neerup Thomsen
Risk Management in large Danish public capital investment programmes
- 2015**
1. Jakob Ion Wille
Film som design Design af levende billeder i film og tv-serier
 2. Christiane Mossin
Interzones of Law and Metaphysics Hierarchies, Logics and Foundations of Social Order seen through the Prism of EU Social Rights
 3. Thomas Tøth
TRUSTWORTHINESS: ENABLING GLOBAL COLLABORATION An Ethnographic Study of Trust, Distance, Control, Culture and Boundary Spanning within Offshore Outsourcing of IT Services
 4. Steven Højlund
Evaluation Use in Evaluation Systems – The Case of the European Commission

5. Julia Kirch Kirkegaard
AMBIGUOUS WINDS OF CHANGE – OR FIGHTING AGAINST WINDMILLS IN CHINESE WIND POWER
A CONSTRUCTIVIST INQUIRY INTO CHINA'S PRAGMATICS OF GREEN MARKETISATION
MAPPING CONTROVERSIES OVER A POTENTIAL TURN TO QUALITY IN CHINESE WIND POWER
6. Michelle Carol Antero
A Multi-case Analysis of the Development of Enterprise Resource Planning Systems (ERP) Business Practices

Morten Friis-Olivarius
The Associative Nature of Creativity
7. Mathew Abraham
New Cooperativism: A study of emerging producer organisations in India
8. Stine Hedegaard
Sustainability-Focused Identity: Identity work performed to manage, negotiate and resolve barriers and tensions that arise in the process of constructing or ganizational identity in a sustainability context
9. Cecilie Glerup
Organizing Science in Society – the conduct and justification of resposable research
10. Allan Salling Pedersen
Implementering af ITIL® IT-governance - når best practice konflikter med kulturen
Løsning af implementerings-problemer gennem anvendelse af kendte CSF i et aktionsforskningsforløb.
11. Nihat Misir
A Real Options Approach to Determining Power Prices
12. Mamdouh Medhat
MEASURING AND PRICING THE RISK OF CORPORATE FAILURES
13. Rina Hansen
Toward a Digital Strategy for Omnichannel Retailing

TITLER I ATV PH.D.-SERIEN

1992

1. Niels Kornum
Servicesamkørsel – organisation, økonomi og planlægningsmetode

1995

2. Verner Worm
*Nordiske virksomheder i Kina
Kulturspecifikke interaktionsrelationer
ved nordiske virksomhedsetableringer i Kina*

1999

3. Mogens Bjerre
*Key Account Management of Complex
Strategic Relationships
An Empirical Study of the Fast Moving
Consumer Goods Industry*

2000

4. Lotte Darsø
*Innovation in the Making
Interaction Research with heterogeneous
Groups of Knowledge Workers
creating new Knowledge and new
Leads*

2001

5. Peter Hobolt Jensen
*Managing Strategic Design Identities
The case of the Lego Developer
Network*

2002

6. Peter Lohmann
*The Deleuzian Other of Organizational
Change – Moving Perspectives of the
Human*
7. Anne Marie Jess Hansen
*To lead from a distance: The dynamic
interplay between strategy and strategizing – A case study of the strategic
management process*

2003

8. Lotte Henriksen
*Videndeling
– om organisatoriske og ledelsesmæssige
udfordringer ved videndeling i
praksis*
9. Niels Christian Nickelsen
*Arrangements of Knowing: Coordinating
Procedures Tools and Bodies in
Industrial Production – a case study of
the collective making of new products*

2005

10. Carsten Ørts Hansen
*Konstruktion af ledelsesteknologier og
effektivitet*

TITLER I DBA PH.D.-SERIEN

2007

1. Peter Kastrup-Misir
*Endeavoring to Understand Market
Orientation – and the concomitant
co-mutation of the researched, the
researcher, the research itself and the
truth*

2009

1. Torkild Leo Thellefsen
*Fundamental Signs and Significance
effects
A Semeiotic outline of Fundamental
Signs, Significance-effects, Knowledge
Profiling and their use in Knowledge
Organization and Branding*
2. Daniel Ronzani
*When Bits Learn to Walk Don't Make
Them Trip. Technological Innovation
and the Role of Regulation by Law
in Information Systems Research: the
Case of Radio Frequency Identification
(RFID)*

2010

1. Alexander Carnera
*Magten over livet og livet som magt
Studier i den biopolitiske ambivalens*